Quoine Pte Ltd
v
B2C2 Ltd

[2020] SGCA(I) 02

Court of Appeal — Civil Appeal No 81 of 2019
Sundaresh Menon CJ, Andrew Phang Boon Leong JA, Judith Prakash JA, Robert Shenton French IJ and Jonathan Mance IJ
14 October 2019

24 February 2020 Judgment reserved.

Sundaresh Menon CJ (delivering the judgment of the majority):

Introduction

1 The world of cryptocurrency trading is not for the faint-hearted. It can involve computer-generated, high frequency transactions in digital quasi-currencies (otherwise known and referred to in this judgment as "cryptocurrencies") which manifest on computer screens or printouts but are not otherwise in a physical form. The transactions which have led to this appeal were conducted by way of algorithms created by the appellant, Quoine Pte Ltd ("Quoine"), and by the respondent, B2C2 Ltd ("B2C2"). Quoine operated a cryptocurrency exchange platform known as QUOINExchange ("the Platform"), and B2C2 traded on the Platform at the material time. Both Quoine and B2C2 were also market-makers on the Platform, which meant that they created liquidity on the Platform by actively placing orders to buy and sell

cryptocurrencies, and in so doing, helped to minimise volatility in the market on the Platform. As is typical of algorithmic trading, the buy and sell contracts on the Platform were concluded without any direct human involvement, save that involved in the creation of the algorithmic processes leading to their formation. Algorithmic trading has been described as follows (see Alain Chaboud *et al*, "Rise of the Machines: Algorithmic Trading in the Foreign Exchange Market", *International Finance Discussion Papers*, 29 September 2009 <http://www.federalreserve.gov/pubs/ifdp/2009/980/ifdp980.pdf> at p 1):

> In algorithmic trading … [traders'] computers directly interface with trading platforms, placing orders without immediate human intervention. The computers observe market data and possibly other information at very high frequency, and, based on a built-in algorithm, send back trading instructions, often within milliseconds. …

Sometimes things can go wrong, as they did in the present case.

2 It transpired that Quoine's failure to make certain necessary changes to several critical operating systems on the Platform set off a chain of events that eventually led to the transactions which are at the heart of this appeal. On 19 April 2017, a total of 13 trades ("the Disputed Trades") were concluded between B2C2 and two other users of the Platform, namely Pulsar Trading Capital and Mr Yu Tomita ("Pulsar" and "Mr Tomita" respectively, and "the Counterparties" collectively), where B2C2 sold one type of cryptocurrency, Ethereum ("ETH"), for another type, Bitcoin ("BTC"), at a rate of either 9.99999 BTC or 10 BTC for 1 ETH. The rates at which the Disputed Trades were concluded were approximately 250 times the then going rate in the market of around 0.04 BTC for 1 ETH. The Disputed Trades were automatically settled by the Platform, and 3092.517116 BTC was debited from the Counterparties' accounts and credited into B2C2's account, while 309.2518 ETH was debited from B2C2's account and credited into the Counterparties' accounts. As the

Counterparties' accounts did not have a sufficient BTC balance to meet the amount that was debited, this resulted in a negative BTC balance in the Counterparties' accounts. When Quoine became aware of the Disputed Trades the next day, it considered the rates at which the trades were concluded to be highly abnormal and unilaterally proceeded to cancel the trades. The debit and credit transactions involving B2C2's account and the Counterparties' accounts were also reversed.

3 B2C2 subsequently commenced proceedings against Quoine on the basis that its unilateral cancellation of the Disputed Trades and reversal of the settlement transactions were in breach of contract and/or breach of trust. The International Judge who heard the matter ("the Judge") rejected all of Quoine's defences and allowed B2C2's claims for both breach of contract and breach of trust. The Judge did not address the issue of damages given that the trial was bifurcated (see *B2C2 Ltd v Quoine Pte Ltd* [2019] 4 SLR 17 ("Judgment") at [134]).

4 A central plank of Quoine's defence both at trial and on appeal was the contention that the contracts underlying the Disputed Trades ("the Trading Contracts") were void or voidable for unilateral mistake. This requires us to consider how the doctrine of unilateral mistake should operate where the contracts in question were entered into by way of the parties' respective algorithms, as transpired here.

5 So far as the asserted breach of trust is concerned, this raises the complex question of whether the relevant cryptocurrency, BTC, may even be regarded as a species of property capable of attracting trust obligations.

6 Both these questions were the subject of extensive analysis by Prof Goh Yihan ("Prof Goh"), whom we appointed as *amicus curiae*. We are deeply grateful to Prof Goh for the extensive research he conducted and the excellent assistance he afforded us on both issues. However, the latter question was not explored in detail in the court below, where the parties appeared to have proceeded on the common ground that BTC *was* a species of property that *was* capable of being the subject of a trust. Despite Prof Goh's able assistance, for reasons which we develop later, we think that the question as to whether BTC can be the subject of a trust should not be dealt with here but should be kept open for another day, in a case in which this issue is properly before the court.

7 In our judgment, for the reasons that follow, the Judge was correct to find that there were no terms in the various contractual documents, whether express or implied, which entitled Quoine unilaterally to cancel the Disputed Trades. We also agree with the Judge that there was no operative mistake on the part of the Counterparties that could be relied upon to vitiate the Trading Contracts. Additionally, given that the BTC was credited into B2C2's account pursuant to valid contracts, B2C2 could not be said to have been unjustly enriched. We therefore dismiss Quoine's appeal with respect to the breach of contract claim. However, we are satisfied that no trust could have arisen over the BTC in B2C2's account, even assuming that the BTC could be the subject of a trust. Therefore, we allow Quoine's appeal with respect to the breach of trust claim and reverse the decision of the Judge in that regard.

The factual background

8 The detailed facts are set out in the Judgment at [14]–[26] and [69]–[105]. It suffices for us to reproduce the salient facts which are relevant to understanding the arguments made in this appeal.

Quoine and the Quoter Program

9 We begin with a brief introduction of Quoine and the program it used for its trades as a market-maker. Quoine is a Singapore incorporated company which operated the Platform at all material times. The Platform allows users to trade cryptocurrencies, like BTC and ETH, for other cryptocurrencies or for fiat currencies. It uses an electronic ledger as an order book for all the orders that are placed by users wishing to buy and sell cryptocurrencies. Real time information on the available buy and sell orders are also displayed on the right panel of what was referred to as the "Trading Dashboard" located on the Platform's website.

10 As mentioned, apart from being the operator of the Platform, Quoine also functions as a market-maker on the Platform. In actively placing buy and sell orders, Quoine adds depth to the order book and ensures that there is a continuous two-sided market on the Platform, thus creating liquidity on the Platform and helping to minimise volatility in the market (see Judgment at [18]). A market-maker also profits from what is known as the "bid-ask" spread, which is the difference between the price at which the market-maker is willing to *buy* or *bid for* a particular currency and the price at which it is willing to *sell* or *ask for* that currency. In the material period, Quoine was the principal market-maker on the Platform. Mr Mario Antonio Gomez Lozada ("Mr Lozada"), Quoine's Chief Technical Officer, estimated that Quoine was responsible for around 98% of the market-making trades on the Platform (Judgment at [73]).

11 Quoine's market-making trades on the Platform are conducted through its "Quoter Program". The Quoter Program retrieves external market prices from other cryptocurrency exchanges and uses this data to determine the orders that Quoine will place on the Platform for market-making purposes.

Importantly, the Quoter Program is proprietary to Quoine and the information generated by it is not available to other users of the Platform (Judgment at [18] and [72]).

The Counterparties and margin trading

12 We touch on some basic aspects of trading on the Platform as described in Quoine's Trading Rules dated 17 March 2017. There are two types of trading offered on the Platform which are relevant to the present dispute. The first is spot trading, where trades are settled instantly with payment for a trade being effected as soon as the trade is completed. The second is margin trading, which is a variant where trades are entered into using borrowed funds (including borrowed cryptocurrencies). Margin traders may obtain loans directly from Quoine, or from other users of the Platform willing to offer them. For margin traders with loans from Quoine, the assets in their accounts serve as the collateral for the loans, which has a bearing on how the Platform's operating system functions. The Platform is designed to close out a margin trader's open positions when it detects that the margin trader may not be able to repay its loans. In the event that the collateral in the margin trader's account falls below a pre-determined percentage of the loan, a margin call is triggered against the margin trader and the Platform automatically force-closes its margin positions by placing market orders on the Platform to close out its open positions. This is known as a "margin sell-out position".

13 The Platform continually monitors a margin trader's "live profit and loss" in respect of each open position ("live P&L") for the purposes of determining how much collateral the margin trader has available in its account. The live P&L is calculated by multiplying the quantity of borrowed cryptocurrency by the difference between its open price and its theoretical close

price. The theoretical close price is calculated by simulating the closing of the margin trader's position against the current price ladder on the Platform's order book. The price ladder refers to the available buy and sell orders with bid and ask prices that are presently on the Platform's order book. Therefore, abnormally priced orders placed on the order book and/or an abnormally thin order book can affect the calculation of the margin trader's live P&L, and cause the Platform to detect that the margin trader is in a margin sell-out position and take steps to force-close the margin trader's positions. In such circumstances, the Platform's operating system will automatically execute the force-closures as market orders to buy or sell the relevant currency at the *best available price on the Platform*. Further, the margin trader is not contacted in advance of the force-closures being executed; nor will it know the precise prices at which the force-closures will be executed (Judgment at [17]).

14 At and around the time of the Disputed Trades, the Counterparties were trading in the ETH/BTC market using ETH borrowed from Quoine (Judgment at [25]).

B2C2 and the Trading Software

15 Next, we introduce B2C2 and its trading software. B2C2 is incorporated in England and Wales and amongst its business interests is that of being a market-maker. As with other exchange platforms on which B2C2 conducts market-making, its entire trading process on the Platform is automated using its algorithmic trading software ("the Trading Software") which was designed to function with minimal human intervention (Judgment at [13]). The Trading Software was designed almost exclusively by Mr Maxime Boonen ("Mr Boonen"), a director of B2C2 and its key witness at the trial. It should be noted that the Trading Software's algorithm is *deterministic* (Judgment at [82]),

which, as defined by both the Judge and Prof Goh, is one which will always produce precisely the same output given the same input. To put it another way, the Trading Software will do just what it was programmed to do and does not have the capacity to develop its own responses to varying conditions. Hence, faced with any given set of conditions, it will always respond to that in the same way. The fact that the Trading Software's algorithm is deterministic is significant to our analysis below in relation to Quoine's defence of unilateral mistake.

16 As explained in the report of Quoine's expert witness, Mr Vikram Kapoor, the Trading Software's algorithm for placing buy and sell orders on the Platform comprises different "layers" at which different algorithmic trading "strategies" are applied. The first layer contains 12 different algorithmic trading strategies that are programmed to work in sequence, and such a series of trading strategies is known as a "strategy chain". The "PureQuote" strategy, which the Judge discussed at [83]–[84] of the Judgment, is the first strategy in the strategy chain of the First Layer. For the relevant sell (or buy) order B2C2 wishes to place on the Platform, the PureQuote strategy first constructs an order book that is internal to the Trading Software based on the 20 best sell (or buy) orders already placed on the Platform's order book. This information is *received from the Platform*. In constructing the internal order book, the PureQuote strategy will also disregard any sell (or buy) order that has been placed for less than a certain quantity of the cryptocurrency. The PureQuote strategy then processes the information on the internal order book and produces an "output" price. In other words, based on the parameters that have been pre-programmed into the PureQuote strategy, the PureQuote strategy determines the optimal output price given the information it has received from the Platform. This output price that is produced by the PureQuote strategy, however, is not the price that the Trading

Software will ultimately quote for the sell (or buy) order it eventually places on the Platform. The output price from the PureQuote strategy merely serves as an input variable for the next trading strategy in the strategy chain, which in turn produces another output price. This process continues through all the trading strategies in the strategy chain, until all the strategy chains in the layers of the Trading Software's algorithm that are running at the material time have been applied. At the end of this process, the final output price produced is that which the Trading Software quotes for the sell (or buy) order it places on the Platform.

17 Where the Platform is functioning properly with a healthy order book, the PureQuote strategy can construct the Trading Software's internal order book by drawing on the 20 best orders from the Platform's order book. However, it was anticipated that there might be situations where the Platform's order book would be either empty or populated by a large number of low volume orders which the PureQuote strategy would disregard, such that the PureQuote strategy would have no or insufficient input from the Platform's order book. This was explained by Mr Boonen as follows:

> … [The output prices from the PureQuote strategy form] the basis of what orders we could later on send into the market, but the prices themselves are, so to speak, the best prices that we would compute on the basis of the order book proposed to us, but then other strategies can worsen those prices for a variety of reasons. So they form a sort of building block … *there must at all time[s] exist such a building block, otherwise the rest of the strategy stack fails.* That's why we use *that method of adding* ***virtual prices*** *that are not necessarily present in the market*, because in a *completely empty order book*, for instance, the strategy cannot run, as … it doesn't have an anchor from which it could create its output. [emphasis added]

18 As alluded to in that extract from Mr Boonen's evidence, when the PureQuote strategy has no or insufficient input from the Platform's order book, it would not be able to "run" and so to produce an output price. Such a situation

would be undesirable, given that the Trading Software was designed to function continuously with minimal human intervention. Mr Boonen therefore programmed the PureQuote strategy to always add a "virtual price" for the sell (or buy) orders of the Trading Software's internal order book. The "virtual price" is also known as a "deep price". The price is "virtual" in the sense that it is not obtained from the Platform, but is inserted into the Trading Software's internal order book so that the PureQuote strategy always has a price input to work with so as to produce an output price, even if there happened to be no or insufficient input from the Platform's order book. In this way, the Trading Software's algorithm would continue functioning and placing orders on the Platform. After some changes, Mr Boonen settled on programming a deep price of 10 BTC to 1 ETH for the sell orders for ETH. This was done before the events with which we are concerned.

The terms of use of the Platform

19 We turn to the terms and conditions of the agreement governing the use of the Platform ("the Agreement"), which were set out on Quoine's website. The Agreement recited that it was "effective upon the date of electronic acceptance" and that it was "entered into by and between [Quoine] and the user of [Quoine's Platform]". We highlight some of the relevant provisions of the Agreement.

20 Under the heading "General Terms", the Agreement stated:

> …
>
> This Agreement sets forth the terms and conditions governing the access and use of the Platform. *This Agreement may be changed at any time by the Company. It is the responsibility of the User to keep himself/herself updated with the current version of the Agreement.* Users and Members waive any claim

> regarding this issue. This Agreement may only be amended with the express consent of the Company. …
>
> …
>
> [emphasis added]

The same text, which purported to allow Quoine unilaterally to vary the Agreement, also appeared under the heading "Membership And Users Of The Platform".

21 Similarly, under the heading "Representations and Warranties", the Agreement provided as follows in sub-para (h) (which we will refer to as "the Without Notice Clause"):

> *You agree that the Company reserves the right to change any of the terms, rights, obligations, privileges or institute new charges for access to or continued use of services at any time, with or without providing notice of such change.* You are responsible for reviewing the information and terms of usage as may be posted from time to time. Continued use of the services or non-termination of your membership after changes are posted or emailed constitutes your acceptance or deemed acceptance of the terms as modified. [emphasis added]

We will refer to the clauses excerpted at [20]–[21], which purported to allow Quoine unilaterally to vary the terms of the Agreement without giving notice to the users of the Platform, collectively as "the Unilateral Variation Clauses".

22 Under the heading "Trading & Order Execution", the Agreement provided that:

> Only registered users or Members are allowed to buy, sell and use the services provided by the Platform. The exchange functions of [t]he Platform will fill in orders at the best possible available market price. Note that as markets move continuously, the prices displayed on user interfaces, on our web app or on mobile apps are in no way guaranteed. The Platform, however, has been designed to allow members to fill at best possible prices and in a timely manner. Nevertheless the Company will not be liable under any circumstances for the

> consequences of any delay in order filling or failure to deliver or perform.
>
> *Furthermore, once an order is filled, you are notified via the Platform and such an action is irreversible.*
>
> …
>
> [emphasis added]

B2C2 relied specifically on the italicised portion, which we will refer to as "the Irreversible Action Clause", to argue that Quoine breached the Agreement by unilaterally cancelling the Disputed Trades.

23 As part of Quoine's defence, it asserted that in addition to the Agreement, the services it provided to the users of the Platform were governed by all other terms and conditions posted on Quoine's website, including those contained within the "'Risks in Virtual Currency Transactions' statement ... which was posted on [Quoine's] website on 22 March 2017" ("the Risk Disclosure Statement").

24 The Risk Disclosure Statement began with an explanatory paragraph:

> There are many risks associated with virtual currency transactions. Please read the following to gain a sufficient understanding of the features, mechanisms, and risks in virtual currency transactions. Please execute your transaction with understanding such features, mechanisms and risks without objection and based on your own judgment and responsibility.

25 A class of risks designated "System Risks" was set out as follows in the Risk Disclosure Statement:

> **8. System Risks**
>
> …
>
> Please be aware that in the event that a customer loses any opportunity (e.g., the Company is unable to receive a customer's order and the customer therefore loses the opportunity to place the order, losing profits that he or she

> ordinarily would have earned) due to emergency system maintenance or a system failure, the Company will not be able to execute a process to fix the error because it will be unable to identify the order details that the customer intended to place (the original order). *The system may produce an aberrant value for the buy or sell price of the virtual currency calculated by the system. Please be aware that if the Company finds that a transaction took effect based on an aberrant value, the Company may cancel the transaction.* Your understanding is appreciated.

[emphasis added]

26 Quoine contended at trial, and on appeal, that when the Risk Disclosure Statement was posted on Quoine's website in March 2017, it introduced a new term into the Agreement (referring to the italicised text in the preceding paragraph) which permitted Quoine to cancel a transaction if it had taken place at an "aberrant value". We will refer to this as "the Aberrant Value Clause".

The events leading to the Disputed Trades

27 Against that background, we outline the events that led to the Disputed Trades. On 13 April 2017, Quoine changed some login passwords for several critical operating systems on the Platform but, due to an oversight, certain necessary changes to the Quoter Program were not implemented (Judgment at [71]). The effect of this was that the Quoter Program could not access external market data from other cryptocurrency exchanges, which prevented it from generating new ETH/BTC orders on the Platform for market-making purposes (Judgment at [72]). Given that Quoine was the primary market-maker on the Platform at the material time, the fact that it stopped placing new orders resulted in the Platform's order book gradually thinning out.

28 It was not until 19 April 2017 that the pre-existing ETH/BTC orders depleted to the point that Mr Lozada described the Platform's order book as "abnormally thin". This affected the Counterparties' live P&L and caused the

Platform to conclude that they were in margin sell-out positions (see [12]–[13] above). This, in turn, triggered margin calls against them and the Platform automatically force-closed their positions by placing market orders to buy ETH at the *best available price on the Platform*, in order to repay the Counterparties' ETH loans. When the margin call was triggered against Pulsar, the market orders to buy ETH were first matched with the lowest priced sell orders available on the Platform's order book at that time. Working its way through the sell orders, Pulsar, through the Platform's algorithm, bought ETH at prices that were increasingly higher in order to fulfil the margin call (see Judgment at [78]–[79]). It became apparent that the loss of liquidity on the Platform also caused the trading systems of other users of the Platform to place sell orders at increasingly higher prices.

29 As for B2C2, the Platform's thinning order book resulted in the PureQuote strategy of the Trading Software having no or insufficient input from the Platform's order book (see [16]–[17] above). This caused the deep price of 10 BTC to 1 ETH for the sell orders for ETH, which had been programmed into the PureQuote strategy, to take effect in the Trading Software's algorithm such that the Trading Software eventually placed sell orders to sell ETH at prices of 9.99999 BTC and 10 BTC to 1 ETH on the Platform (see [18] above). When B2C2's orders became the lowest priced sell orders available on the Platform's order book, they matched with Pulsar's market orders to buy ETH. The force-closure of Mr Tomita's positions was slightly different, but it was not suggested that anything turned on this (Judgment at [80]). Eventually, a total of 13 trades were concluded between B2C2 and the Counterparties, these being the Disputed Trades which were concluded at approximately 250 times what had been the prevailing market rate of around 0.04 BTC for 1 ETH. The relevant amount of BTC was accordingly debited from the Counterparties' accounts and credited

into B2C2's account, while the corresponding amount of ETH was debited from B2C2's account and credited into the Counterparties' accounts (see [2] above).

30 Mr Lozada, upon becoming aware of the Disputed Trades, and with the strenuous encouragement of Pulsar, decided that these should be cancelled and the resulting debit and credit transactions reversed. The Disputed Trades were thus cancelled on 20 April 2017 by Quoine with the corresponding debit and credit transactions reversed.

The decision below

31 At the trial, B2C2 argued that Quoine's unilateral cancellation of the Disputed Trades and reversal of the settlement transactions were in breach of contract and/or breach of trust. In response, Quoine raised the following defences to defend its unilateral cancellation of the Disputed Trades: (a) it was contractually entitled to cancel the trades by reason of two terms it sought to imply into the Agreement; (b) it was contractually entitled to cancel the trades by reason of the Aberrant Value Clause in the Risk Disclosure Statement; (c) the Trading Contracts were void on the basis of unilateral mistake at common law, or, in the alternative, voidable on the basis of unilateral mistake in equity; (d) the Trading Contracts were void on the basis of common mistake at common law; and (e) B2C2 would otherwise be unjustly enriched at the expense of the Counterparties. As mentioned, the Judge rejected all of Quoine's defences and allowed B2C2's claims for both breach of contract and breach of trust. We briefly set out the Judge's findings in relation to B2C2's claims and Quoine's defences.

The contractual relationship

32 We first set out the Judge's findings in relation to the contractual relationship between B2C2, Quoine and the Counterparties. This in particular shaped the Judge's analysis of Quoine's defence of unilateral mistake. B2C2 argued that Quoine was a common counterparty to all the trades made between the users of the Platform. On this basis, it was said that the concluded trades took the form of back-to-back contracts between the buyer and Quoine at one end, and the seller and Quoine at the other. Quoine, on the other hand, contended that the trades were concluded directly between the buyer and the seller, and that it only provided the Platform on which the trades would be conducted. The Judge agreed with Quoine and held that the contract in respect of each concluded trade was made directly between the buyer and the seller (see Judgment at [131]), though each of the parties was also contractually bound with Quoine under the Agreement which governed the terms of use of the Platform.

B2C2's breach of contract and breach of trust claim

33 With respect to B2C2's breach of contract claim, the Judge held that Quoine's unilateral cancellation of the Disputed Trades was a breach of the Agreement, and in particular of the Irreversible Action Clause (see [22] above; Judgment at [136]–[137]).

34 As for B2C2's breach of trust claim, the Judge found that Quoine held the BTC in B2C2's account, which had been credited following the Disputed Trades, on trust for B2C2, and so Quoine was in breach of trust when it reversed the relevant credit transaction (see Judgment at [146]). The Judge found that Quoine held the BTC on trust for B2C2 on the basis that the "three certainties" had been fulfilled, namely, certainty of subject matter, certainty of objects and

certainty of intention to create a trust. First, the Judge held that there was certainty of subject matter because cryptocurrency should be treated as property that was capable of being held on trust, on the basis that it satisfied the definition of a property right in *National Provincial Bank v Ainsworth* [1965] 1 AC 1175 ("*Ainsworth*") at 1248, in that it was definable, identifiable by third parties, capable in its nature of assumption by third parties, and had some degree of permanence or stability. In any case, the Judge noted, Quoine did not dispute this (Judgment at [142]). Second, the Judge found that there was certainty of objects, given that the beneficiaries were identifiable from the individual accounts of the users of the Platform (Judgment at [143]). Third, the Judge found that there was certainty of intention, based on the fact that the users' assets were managed separately from Quoine's own assets, thereby indicating that Quoine intended to hold the assets of an individual user on trust for that user (Judgment at [145]).

Quoine's defences

35 Turning then to Quoine's defences, Quoine first sought to contend that two terms ought to be implied into the Agreement (collectively, "the Proposed Implied Terms"), namely:

(a) Quoine may reverse any trades which had been executed at any abnormal rate or price as a result of any technical and/or system failure and/or error affecting the Platform; and

(b) Quoine may reverse any trades resulting from orders placed in breach of the terms of the Agreement, including any trade resulting from any orders which amounted to market manipulation and/or abuse and, therefore, entailed an "unauthorised use" of the Platform.

36 The Judge found that the Proposed Implied Terms, which would allow Quoine to reverse trades on the Platform under certain circumstances, contradicted the Irreversible Action Clause which was an express term of the Agreement (Judgment at [152]). The Judge also found that in any event, the Proposed Implied Terms were not necessary to give business efficacy to the Agreement. It was instead the Irreversible Action Clause, the express term, that brought certainty to the Platform and led to a clear apportionment of risk (Judgment at [153]–[154]).

37 Second, Quoine argued that the Aberrant Value Clause in the Risk Disclosure Statement (see [25]–[26] above) allowed it unilaterally to cancel the Disputed Trades. The Judge, however, disagreed that this had been incorporated into the Agreement.

38 Third, Quoine argued that it was entitled to cancel the Disputed Trades because the Trading Contracts were void on the basis of unilateral mistake at common law. Quoine submitted that the Counterparties had entered into the Trading Contracts under two mistaken beliefs: (a) that it was necessary to close out their positions in response to the margin calls which the Platform made on them ("the First Mistaken Belief"); and (b) that they were buying ETH for BTC under contracts at prices which accurately represented or did not deviate significantly from the true market value and/or price of ETH relative to BTC on 19 April 2017 ("the Second Mistaken Belief"). Quoine argued in the alternative that the Trading Contracts were voidable on the basis of unilateral mistake in equity. Quoine submitted that by deliberately including the deep prices in the Trading Software, B2C2's conduct was unconscionable and amounted to sharp practice.

39 In considering the issue of unilateral mistake, the Judge held that where it was necessary to assess the state of mind of a party in situations where acts of *deterministic* computer programs were in issue, regard should be had to the state of mind of the programmer of the relevant program at the time it was written – which in the present case would be that of Mr Boonen (Judgment at [211]). The Judge rejected Quoine's contention that the court should instead approach the matter on the basis of considering what the contracting parties were likely to have known and intended if, hypothetically, they had met on the "floor of the exchange" for the purpose of entering into the Disputed Trades on 19 April 2017 (Judgment at [200]). The Judge found this approach wholly artificial given that the contracting parties had chosen to use deterministic algorithms as the means of entering into the Trading Contracts (see Judgment at [204]).

40 The Judge held that the Trading Contracts were not void on the basis of unilateral mistake at *common law*. With regard to the First Mistaken Belief, the Judge found that Mr Tseung Wai Kit ("Mr Tseung"), a co-founder of Pulsar, did genuinely hold such a mistaken belief. But the Judge was of the view that this was not a mistaken belief as to a term of the Trading Contracts (see Judgment at [220] and [222]). As regards the Second Mistaken Belief, not only did the Judge find that Mr Tseung did in fact hold such a mistaken belief, the Judge also held that it was a mistake as to a term of the Trading Contracts (Judgment at [227]–[228]).

41 In considering whether Mr Boonen had actual knowledge of the First Mistaken Belief and the Second Mistaken Belief, contrary to Quoine's assertions, the Judge did not think that there was any malicious motive on Mr Boonen's part in designing the Trading Software and including the deep prices in the manner that he did. Mr Boonen had settled on programming a deep price of 10 BTC to 1 ETH for the sell orders for ETH (see [18] above) after

reducing it twice, first from an initial price of "a very high number" of BTC to 1 ETH to 50 BTC to 1 ETH, and then to 10 BTC to 1 ETH, and the Judge accepted that these reductions were done for a variety of legitimate reasons (see Judgment at [96]–[97]). The Judge also accepted that although Mr Boonen knew, at the time he designed the Trading Software, that it would place sell orders at the deep price if the Platform's order book became empty, Mr Boonen did not ever consider that there was a real possibility of the deep price orders being executed (see Judgment at [123]). The Judge found that Mr Boonen's design of the Trading Software and choice of the deep price were chiefly directed to ensuring that the Trading Software remained operational rather than exploiting the existence of illiquidity on the Platform or a thinning order book (see Judgment at [121]). The Judge concluded that while Mr Boonen's programming was opportunistic in the sense that B2C2 should be best placed to make a profit if the unlikely became a reality, it was in no respect sinister (Judgment at [125]).

42 The Judge also accepted Mr Boonen's evidence that he was unaware of the glitches causing illiquidity on the Platform until after the events of 19 April 2017. While Mr Boonen had also made changes to the Trading Software's code on 13 April 2017, the Judge accepted that he had done so independent of and without knowledge of Quoine's failure, on the same day, to take certain necessary steps to secure the continued proper functioning of the Quoter Program (see Judgment at [100]–[102]). There was also no evidence to show that Mr Boonen had turned his mind to the relationship between the margin traders and those who had loaned them money, much less programmed the Trading Software to exploit this relationship by causing its deep prices to consummate force-closures of the positions of margin traders (see Judgment at [124] and [223]). The Judge found that Mr Boonen also did not turn his mind to

the circumstances that might lead to trades being executed at the deep prices (Judgment at [230]). Therefore, the Judge concluded that Mr Boonen did not have actual knowledge of the First Mistaken Belief and the Second Mistaken Belief. He accordingly found that there was no basis for Quoine to rely on unilateral mistake at common law to void the Trading Contracts.

43 The Judge also held that the Trading Contracts were not voidable on the basis of unilateral mistake in *equity*, because he found Mr Boonen had no constructive knowledge of either the First Mistaken Belief or the Second Mistaken Belief (see Judgment at [233]). The Judge further held that there was no impropriety on B2C2's part, and its conduct, even if opportunistic, was not sinister (Judgment at [236]).

44 Fourth, Quoine argued that it was entitled to cancel the Disputed Trades because the Trading Contracts were void on the basis of common mistake at common law. Quoine contended that at the time the Disputed Trades were concluded, both the Counterparties and B2C2 wrongly assumed that (a) the Platform was working correctly and (b) the trades were therefore being transacted under normal market conditions, meaning at prices which accurately reflected or did not deviate significantly from the true market value and/or price of ETH relative to BTC on 19 April 2017. The Judge held that this defence failed because even if Quoine held a mistaken belief as to the prices at which the Disputed Trades were to be concluded, Mr Boonen (and thus B2C2) did not (see Judgment at [237]–[239]).

45 Fifth, Quoine argued that it was necessary to cancel the Disputed Trades in order to prevent B2C2 from being unjustly enriched at the expense of the Counterparties. The Judge acknowledged that as a matter of legal formality, a cause of action in unjust enrichment would only accrue if B2C2 succeeded in

its suit, and it would technically accrue to the Counterparties and not to Quoine. However, since B2C2 had not applied for this defence to be struck out, the Judge decided to treat it as a potential defence (Judgment at [242]–[244]). He found that the fact that the Trading Contracts were valid and enforceable operated as a bar to any action in unjust enrichment (Judgment at [247], [249] and [252]).

46 As for the relief sought by B2C2, the Judge declined to allow B2C2's prayer for specific performance, on the basis that the price of BTC at the time of the Judge's decision was significantly higher than that when the Disputed Trades were concluded, and this would therefore cause substantial hardship to Quoine (Judgment at [256]).

The issues on appeal

47 The issues that arise in this appeal and that we will address in this Judgment are the following:

(a) What were the contractual arrangements between B2C2, Quoine and the Counterparties?

(b) Was Quoine contractually entitled to cancel the Disputed Trades by reason of any express or implied terms of its contract with B2C2?

(c) In relation to Quoine's defence of unilateral mistake, did the Judge err in finding that Mr Boonen did not have actual or constructive knowledge of a relevant mistaken belief on the part of the Counterparties in relation to the Disputed Trades?

(d) Were the Trading Contracts void on the basis of common mistake at common law?

(e) Was Quoine entitled to cancel the Disputed Trades on the basis that B2C2 would otherwise be unjustly enriched at the expense of the Counterparties?

(f) Did Quoine hold B2C2's cryptocurrency assets on trust?

Our decision

Issue (a): The contractual relationships

48 We begin with the question of how the contractual relationships between B2C2, Quoine and the Counterparties should be characterised. As the Judge noted, the resolution of this question is relevant to the subsequent analysis on unilateral mistake, in so far as it is first necessary to identify which contract was affected by any asserted mistake and who the mistaken party was (Judgment at [129]).

49 B2C2 contended that the correct way to understand the contractual relationships was to see the Trading Contracts as part of a "spider's web" of contracts, with Quoine as the central counterparty to both sides of each trade. In this way, the Platform would enable trading to be conducted on an anonymous basis as between the ultimate buyers and sellers. B2C2 argued on this basis that there could be no operative mistake as to the terms of the trading contracts made *between Quoine and B2C2* in relation to the Disputed Trades. Any alleged unilateral mistake would be that of the Counterparties, and so Quoine's defence of unilateral mistake would fail at the threshold. Quoine, on the other hand, argued that the Agreement made it plain that Quoine merely provided a service to the users of the Platform, and that the trading contracts were made directly between the buyers and the sellers.

50 We affirm the Judge's analysis of the contractual arrangements between the various parties, in which he accepted Quoine's characterisation of the contractual relationships. In essence, he held that the Trading Contracts were formed directly between B2C2 and the Counterparties (Judgment at [131]). The Trading Contracts constituted one of three categories of contracts the Judge identified, as follows (see Judgment at [126]):

(a) The first category was the "Platform contracts", which governed the use of the services provided by the Platform, the parties to which were Quoine and the individual users of the Platform, and the terms of which were found in the Agreement.

(b) The second category was the "Margin contracts", which concerned the arrangements based on which the margin traders would have their transactions financed. In the present case, the parties to these were Quoine and the Counterparties.

(c) The third category was the "Trading contracts", which were the contracts that came into existence when trades were concluded and governed the relationship between the parties to those trades. For the avoidance of doubt, we refer to this category of contracts as "trading contracts". As for the specific trading contracts that underlay the Disputed Trades, we refer to these as Trading Contracts, as noted at [4] above. The Judge held that B2C2 and the Counterparties were the parties to the Trading Contracts in question in this case.

51 In our judgment, this characterisation of the trading contracts best accords with the terms of the Agreement, which made clear that Quoine was merely providing a *service* to the users of the Platform which would transact with one another in the exchange of cryptocurrencies on the Platform.

52 First, the "General Terms" of the Agreement stated as follows:

> Quoine is a platform that provides services that allow the exchange of virtual currencies such as [BTC] for fiat currencies. …
>
> …
>
> This Agreement sets forth the terms and conditions governing the access and use of the Platform. …
>
> …

The same was repeated under the heading "Membership And Users Of The Platform".

53 Second, under the heading "Fees, Funding & Withdrawals", it was stated that "[a]s compensation for [t]he Platform services … [Quoine] charges a fee on each transaction initiated by [the users of the Platform]". This lent support to the contention that Quoine was merely providing a service to the users of the Platform for which it charged a fee.

54 Third, under the heading "Trading & Order Execution", it was stated that:

> Only registered users or Members are allowed to buy, sell and use the services provided by the Platform. The exchange functions of [t]he Platform will fill in orders at the best possible available market price. …
>
> …

This suggested that Quoine's primary function was to operate the Platform which would fill orders placed by its users at the best *available* market price.

55 We therefore agree with the Judge that Quoine was only providing the services available on the Platform and that it was the parties to the trading contracts that were responsible for whether and on what terms they would place

or fill orders. This, however, is not to say that there was no contractual relationship between Quoine and the users of the Platform. First, as we have noted at [50(a)] above, Quoine as the provider of the Platform's services entered into Platform contracts with the users of the Platform. Second, as noted at [50(b)] above, Quoine could be and was party to Margin contracts. Third, given that Quoine also acted as a market-maker on the Platform, there would have been situations where Quoine was the counterparty to a concluded trade, in which case it would have been party to a trading contract with a user of the Platform. However, the trades that we are concerned with in the present case, specifically the Disputed Trades, did not involve that situation.

56 In addition, we do not accept B2C2's other arguments as to why the contractual relationships ought to be seen as a "spider's web" of contracts. B2C2 contended that Quoine must have interposed itself as a "middle-man" in any trade and was obliged to underwrite the risk of a counterparty not being able to fund a trade, given that trading on the Platform was conducted anonymously and the users of the Platform would not have visibility of the creditworthiness of potential counterparties. We do not accept this because the terms of the Agreement seem to us to say the very opposite:

> **Trading & Order Execution**
>
> …
>
> [Quoine] and its affiliates *assume no responsibility for any loss or damage incurred by members or users as a result of their use of [t]he Platform …*
>
> …
>
> **Representations and Warranties**
>
> As a Member or User, you agree to the following:
>
> …

> **d.** You agree that use of the service is *at your own risk* and you are solely responsible for interactions … with any other Member or User of the service. [Quoine] … *assume[s] no responsibility whatsoever for harm that may come to you as a result of your interactions with any other Member or User of the service* …
>
> …
>
> [emphasis added]

57 It is evident from these terms that Quoine had expressly sought to disclaim any liability for losses that users of the Platform might suffer arising from their use of the Platform. This would include the credit risk of a counterparty.

58 We also do not accept B2C2's argument that the trading contracts could not have been formed directly between the buyers and sellers on the Platform because all trading was done anonymously. Even if the traders were unaware of who their potential counterparties might be before the conclusion of the trades, once a trade was completed, the identity of the parties to the trade became ascertainable by way of a unique user identification number (Judgment at Annex 3). Further, there is no difficulty in the fact that the traders would not know who their counterparties were until after the trades were concluded, given that they were agreeing in effect to enter into contracts with such other users of the Platform as accepted their bids or asks as the case might be. We will discuss this in greater detail when we examine the formation of contracts by algorithmic trading (at [94]–[96] below).

Issue (b): Express and implied terms of the Agreement

59 Quoine argued that there were terms in the Agreement, both express and implied, which allowed it to cancel the Disputed Trades. We do not accept these contentions for the following reasons.

The Aberrant Value Clause

60 Quoine argued on appeal (as it did at trial) that the Aberrant Value Clause in the Risk Disclosure Statement (see [25]–[26] above) entitled it to cancel the Disputed Trades. It also contended that the Unilateral Variation Clauses (see [20]–[21] above) allowed it unilaterally to vary the terms of the Agreement when it uploaded the Risk Disclosure Statement on its website *without* giving notice to the users of the Platform. On the other hand, B2C2 maintained that neither the Risk Disclosure Statement nor the Aberrant Value Clause had been incorporated into the Agreement. B2C2 further submitted that even if the Aberrant Value Clause had been incorporated into the Agreement, it did not assist Quoine because it would only have permitted Quoine to cancel transactions in which the prices of the trades had been incorrectly calculated by Quoine's system due to a "system failure" or "malfunction". "System failure" and "malfunction" were defined terms in the Risk Disclosure Statement, and required there to be a situation where customers could "no longer … place orders over the Internet", or the orders "arrive[d] late or [could not] be placed" (see also [68] below). The Disputed Trades were not such transactions.

61 The Judge found that the Unilateral Variation Clauses, properly construed, did not allow Quoine to change the terms of the Agreement without its drawing this to the attention of the users of the Platform in some way. Quoine thus had to provide notice to the users in order to effect a change to the terms of the Agreement. The Judge also found that merely uploading the Risk Disclosure Statement on Quoine's website without any indication that it was intended to have legal effect did not constitute such notice that changes had been made to the Agreement. This was because the Risk Disclosure Statement purported only to be a summary of risks with no indication that it was intended to have legal effect (see Judgment at [174]–[176]).

62 We affirm the Judge's analysis on this point. Although it was not necessary for Quoine to obtain the consent of a user of the Platform before changing the terms of the Agreement, we are satisfied that a user had to have reasonable means of knowing that there had been a modification to the terms and what that modification was before any such change could have legal effect. Armed with such knowledge, the user could then decide whether or not it would continue to use the Platform. In this case, all Quoine did was to upload the Risk Disclosure Statement onto its website without more. This could not on any basis have sufficed to constitute the requisite notice.

63 Further, in determining whether notice of changes to the Agreement had to be given, we also have regard to the Unilateral Variation Clauses, which include the Without Notice Clause (see [21] above). We reproduce the Without Notice Clause here:

> You agree that [Quoine] reserves the right to change any of the terms, rights, obligations, privileges or institute new charges *for access to or continued use of services at any time, with or without providing notice of such change*. You are responsible for reviewing the information and terms of usage as may be posted from time to time. *Continued use of the services or non-termination of your membership after changes are posted or emailed constitutes your acceptance or deemed acceptance of the terms as modified.* [emphasis added]

64 We note that the Without Notice Clause *expressly* stated that Quoine was permitted to effect changes to any of the terms, rights, obligations, privileges or to institute new charges for access to or continued use of services "without providing notice of such change". However, the changes contemplated by this clause were restricted only to changes pertaining to "access to or continued use" of Quoine's services. We assume, without finding, that incorporating the Aberrant Value Clause into the Agreement would be such a change. Even so, we think that it was *implicit* within the Without Notice Clause

that a user of the Platform ought to be given the opportunity to consider the change in question, so that it could decide whether to continue using Quoine's services. We say this for three reasons.

65 First, the Without Notice Clause stated that changes to the terms would be "posted or emailed", which suggested that Quoine would take positive steps to bring the changes to the attention of the users of the Platform. Second, the clause stated that continued use of Quoine's services after such changes had been posted or emailed would amount to an affirmation or deemed acceptance of the terms as modified. This part of the clause would not make sense if the users did not have an *awareness* of those modified terms to begin with. Third, the "General Terms" of the Agreement provided that the users of the Platform were responsible for reviewing the changes to the Agreement:

> … This Agreement may be changed at any time by [Quoine]. *It is the responsibility of the User to keep himself/herself updated with the current version of the Agreement.* Users and Members waive any claim regarding this issue. … [emphasis added]

This contemplated that users would have the *opportunity* to review the changes in the first place, which in turn necessitated them being given notice of these changes.

66 For these reasons, we do not think that the requirement of notice was displaced by the Without Notice Clause. Sufficient notice of the incorporation of the Aberrant Value Clause as a term of the Agreement had to be given to users of the Platform before it could be regarded as having been incorporated into the Agreement. We acknowledge that pursuant to the "General Terms" of the Agreement, the onus was on the users of the Platform to keep themselves updated with the latest version of the Agreement. However, there must at least have been some indication on Quoine's website to inform users about

amendments to the Agreement. We therefore agree with the Judge that simply uploading the Risk Disclosure Statement onto Quoine's website without alerting users to the fact that a new term had been introduced was insufficient to constitute the requisite notice (see Judgment at [176]).

67 Moreover, as the Judge pointed out, the Risk Disclosure Statement appeared to be nothing more than a summary of the various risks that users would expect to face when using the Platform (see [24] above), and there would have been no reason for a user reading it to think that amendments to the terms of the Agreement were embedded within it. We also find no reason to disturb the Judge's finding that there was nothing on Quoine's website, the Agreement, or the Risk Disclosure Statement to alert the user to the need to read these documents together.

68 In any case, even if the Aberrant Value Clause had been incorporated into the Agreement, we do not think that it had the effect that Quoine suggested it did of entitling it to cancel the Disputed Trades. The relevant portion of the Risk Disclosure Statement which contained the Aberrant Value Clause (the italicised text below) stated:

> There is the risk that a system failure may occur due to changes to the external environment, etc., and this may disrupt a customer's ability to execute transactions. A "system failure" is when [Quoine] finds that a malfunction (not including obstructed network lines or problems with a customer's computer, etc.) has clearly arisen in the system required to provide [Quoine's] services, and customers are no longer able to place orders over the Internet ([Quoine's] website, mobile site, or applications) or customers' orders arrive late or cannot be placed.
>
> Please be aware that in the event that a customer loses any opportunity (e.g., [Quoine] is unable to receive a customer's order and the customer therefore loses the opportunity to place the order, losing profits that he or she ordinarily would have earned) due to emergency system maintenance or a system

> failure, [Quoine] will not be able to execute a process to fix the error because it will be unable to identify the order details that the customer intended to place (the original order). *The system may produce an aberrant value for the buy or sell price of the virtual currency calculated by the system. Please be aware that if [Quoine] finds that a transaction took effect based on an aberrant value, [Quoine] may cancel the transaction.* Your understanding is appreciated.
>
> [emphasis added]

69 In our judgment, having regard to these portions of the Risk Disclosure Statement, the Aberrant Value Clause was meant to apply in situations where there was a discrepancy between the value input by a user of the Platform and the value generated or calculated by the system "due to emergency system maintenance or a system failure". In short, this would be the case where the value generated by the Platform was not the value intended by the user. We come to this conclusion because of the words "[Quoine] will not be able to execute a process to fix the error because it will be unable to identify the order details that the customer *intended to place*" [emphasis added]. It would be unsurprising in such circumstances that Quoine could cancel the transaction; this was simply never an intended transaction. In the present case, however, the only alleged "malfunction" in the Platform's system was the Quoter Program not being able to access external price data and therefore not being able to generate new orders, which led to a gradual thinning out of the Platform's order book. Apart from that, the market orders placed by the Platform on the Counterparties' behalf were executed exactly as intended, which was to purchase ETH at the best available price on the Platform at the material time. The prices of B2C2's sell orders for ETH, at prices of 9.99999 BTC and 10 BTC to 1 ETH, which orders were matched with the Counterparties' market orders, were similarly not "aberrant" in the sense that they were exactly what B2C2 intended them to be; they were simply the result of the pre-programmed deep price of 10 BTC to 1 ETH in the PureQuote strategy taking effect (see [29]

above). The Disputed Trades were concluded based on prices *correctly* quoted by the Trading Software for B2C2, and market orders that were *correctly* placed by the Platform for the Counterparties.

70 Aside from this, if we were to accept Quoine's position, it would seem to lead to the conclusion that the Aberrant Value Clause enabled Quoine to undertake some sort of "reasonableness" check on transactions entered into by others and then to cancel whatever transactions *it* thought was beyond the bounds of reason. We do not think this can possibly be correct.

The Proposed Implied Terms

71 We turn then to Quoine's contention that it was entitled to cancel the Disputed Trades on the basis of the Proposed Implied Terms (see [35] above). We agree with the Judge that the terms sought to be implied are incompatible with the Irreversible Action Clause (see [22] above). The Proposed Implied Terms would allow Quoine to reverse trades on the Platform which (a) had been executed at abnormal prices as a result of any error affecting the Platform, or (b) resulted from orders placed in breach of the terms of the Agreement. The Irreversible Action Clause, however, provided that "once an order is filled, [the user is] notified via the Platform and such an action is irreversible".

72 In *Sembcorp Marine Ltd v PPL Holdings Pte Ltd and another and another appeal* [2013] 4 SLR 193 at [94]–[95], we held that a term may only be implied into a contract where the parties did not contemplate the issue at all and so left a gap in their contractual arrangements. If the question is whether the Agreement made provision for whether and when a concluded trade could be reversed, the answer to this was that the Irreversible Action Clause made it clear that once an order had been filled and the parties to the trade had been notified

by the Platform, such an action was *irreversible*. In this regard, the Proposed Implied Terms are inherently incompatible with the Irreversible Action Clause given that they purport to allow Quoine to reverse trades which had been executed and had become irreversible.

73 Quoine sought to meet this by contending that the Irreversible Action Clause only applied to the users of the Platform and not to Quoine itself as the owner and operator of the Platform. We disagree. It is clear from the plain words of the Irreversible Action Clause and the adjacent terms that it was meant to apply to all orders that had been filled, regardless of whether it was a user of the Platform or Quoine itself that was seeking to reverse the trades. The Irreversible Action Clause (the italicised text below) was found under the heading "Trading & Order Execution", which provided as follows:

> Only registered users or Members are allowed to buy, sell and use the services provided by the Platform. The exchange functions of [t]he Platform will fill in orders at the best possible available market price. Note that as markets move continuously, the prices displayed on user interfaces, on our web app or on mobile apps are in no way guaranteed. The Platform, however, has been designed to allow members to fill at best possible prices and in a timely manner. Nevertheless [Quoine] will not be liable under any circumstances for the consequences of any delay in order filling or failure to deliver or perform.
>
> *Furthermore, once an order is filled, you are notified via the Platform and such an action is irreversible.*
>
> [Quoine] and its affiliates assume no responsibility for any loss or damage incurred by members or users as a result of their use of [t]he Platform …
>
> [emphasis added]

74 As the Judge noted at [151] of the Judgment, the Agreement governed the contractual relationship between Quoine and all the users of the Platform. Therefore, the terms of the Agreement would presumptively be equally

applicable to Quoine. This view is supported by the sentence immediately preceding the Irreversible Action Clause, which sought to limit *Quoine's* liability for the consequences of any delay in the filling of an order or any failure to deliver or perform. Similarly, the sentence that immediately followed the Irreversible Action Clause limited *Quoine's* liability for any loss incurred by a user as a result of its use of the Platform. These sentences would have been unnecessary if the provisions under the heading "Trading & Order Execution" did not apply to Quoine. Furthermore, the Irreversible Action Clause itself provided that once an order had been filled, and the users of the Platform had been notified through the Platform, "such an action", which in this context could only mean the filling of the order, was irreversible. As the Judge noted at [152] of the Judgment, the word "irreversible" was plainly not qualified in any way and drew no distinction between the users of the Platform and Quoine as the operator of the Platform.

75 Subsequent to the hearing of this appeal, Quoine drew our attention to an article which commented on several aspects of the Judgment: see Kelvin Low & Eliza Mik, "Unpicking a Fin(e)tech Mess: Can Old Doctrines Cope in the 21st Century?", *Oxford Business Law Blog*, 8 November 2019 <https://www.law.ox.ac.uk/business-law-blog/blog/2019/11/unpicking-finetech-mess-can-old-doctrines-cope-21st-century> (accessed 14 November 2019) ("*Low & Mik*"). The authors argued that if Quoine itself was not a counterparty to the Disputed Trades, then it must have been acting as agent for B2C2 and the Counterparties, and the users of the Platform in general, for the purposes of matching trades. On that basis, the authors contended that the Irreversible Action Clause should be construed to mean that only the *instructions* given by the users to Quoine as agent were irreversible, and not the trades themselves. We respectfully disagree.

76 First, it appears that the authors' underlying premise was that the relationship between Quoine and the users of the Platform was binary – either Quoine was the central counterparty to all trades on the Platform, or it acted as agent for the users. However, we have held that the trading contracts were formed directly between the parties to the respective trades (see [50(c)] above) and this did not require a finding that Quoine acted as agent for the parties. We consider the function of the Platform to be somewhat similar to that of an Internet messaging application, which allows users of the application to communicate with one another. If a contract is formed between two users on this messaging application, it would be artificial to suggest that the owner or operator of the Platform acted as an agent for these users. There was no suggestion that trading instructions were first passed to Quoine as a third party before they were uploaded on the Platform. Second, and more fundamentally, we consider the authors' interpretation of the Irreversible Action Clause to be contrary to the plain words of the clause. The irreversibility applies to the action of filling an order, as we have held at [74] above.

77 For these reasons, we do not think that it is permissible to imply the terms that Quoine was contending for.

Issue (c): Unilateral mistake

78 We turn to the central feature of Quoine's defence, and one which the Judge acknowledged was "the most troubling and difficult in this case" (Judgment at [183]). Quoine relied on both unilateral mistake at common law and in equity to argue that the Trading Contracts should be vitiated, and therefore that its cancellation of the Disputed Trades was warranted. There is a threshold question whether Quoine, which was not a party to the Trading Contracts, could invoke the doctrine by way of defence to the claim that it

breached *its* contract with B2C2 (meaning, the Irreversible Action Clause in the Agreement). In other words, the question is whether Quoine would necessarily be excused of its breach even if the Trading Contracts were vitiated. We assume, without deciding, that the defence of unilateral mistake was available to Quoine in the indirect way argued. The parties did not dispute this specific point. As noted at [45] above and [132] below, a broadly similar approach was taken by the Judge and by us in the context of the claim in unjust enrichment. Leaving this to the side, the complexity arose because the defence of unilateral mistake was being raised for the first time, as far as we are aware, in the context of algorithmic trading and the formation of contracts by such means. B2C2 and the Counterparties had entered into the Trading Contracts by means of B2C2's and Quoine's deterministic algorithms. B2C2 and the Counterparties therefore did not know until *after* the Trading Contracts had been entered into, whether an offer would be made or accepted, or the terms on which a contract would be concluded. How then could the doctrine of unilateral mistake apply in this situation, where the contracting parties did not know the specific terms on which the Trading Contracts would be entered into? It is therefore necessary to consider the principles behind the doctrine before considering its application to this novel situation.

79 We state at the outset that we approach this issue of unilateral mistake on the footing that as a court applying the common law, our task is to apply the existing law on the doctrine subject to incremental adjustments being made in order to suit the particular context. Algorithmic trading is an area of dynamic change, and it might be more appropriate for legislative intervention in due course, if it were thought that a more fundamental redesign of the applicable legal framework is called for. That is certainly not our view at this time and we

consider that the existing body of law can be meaningfully adapted to deal with the situation at hand.

Doctrine of unilateral mistake at common law and in equity

80 We begin by setting out the requirements for unilateral mistake at common law and in equity, and in so doing, we highlight their differences in requirements and consequences. This was the subject of our decision in *Chwee Kin Keong and others v Digilandmall.com Pte Ltd* [2005] 1 SLR(R) 502 ("*Digilandmall.com*"). In essence, one party must have transacted while operating under a mistake as to a *fundamental term* of the contract (see *Digilandmall.com* at [34] and [80]). As we note below, there is a question as to whether this also applies in the context of the doctrine in equity. But beyond this:

> (a) for unilateral mistake at common law, the non-mistaken party must have had *actual* knowledge of the mistaken party's mistake, and if this is established, the contract will be rendered *void*; but
>
> (b) for unilateral mistake in equity, the non-mistaken party must have had at least *constructive* knowledge of the mistaken party's mistake and must have engaged in some *unconscionable* conduct in relation to that mistake, and if this is established, the contract will be *voidable*.

81 We begin with the rationale underlying the doctrine of unilateral mistake at common law. As we alluded to in *Digilandmall.com*, the reason for the doctrine is that "a party who is aware of the error made by the other party cannot claim that there is *consensus ad idem*" (at [31]). It follows that the doctrine is best understood by having regard to the principles governing offer and acceptance. A contract cannot be formed unless the contracting parties agree as

to the *terms* of the contract. Unilateral mistake at common law voids a contract because the contracting parties have not in fact reached an agreement when one party is mistaken as to the terms put forward by the other party, and that other party knows this to be the case. In such circumstances, there is no correspondence between offer and acceptance. To explain this, it is helpful to set out what has been explained in *The Law of Contract in Singapore* (Andrew Phang Boon Leong gen ed) (Academy Publishing, 2012) at para 10.144:

> … By [the theory of "promisee objectivity"], there is no contract where the non-mistaken party knows … that the mistaken party does not intend to contract on the intended terms. There is no departure from an "objective" view of agreement because the law, in looking at the non-mistaken party's knowledge of the mistaken party's intention is not asking what the mistaken party intended. Instead, it is looking at what the non-mistaken party had reason to believe for the purpose of interpreting the communication made by the mistaken party to the non-mistaken party. …

In short, where the non-mistaken party knows that the mistaken party made a mistake in communicating a term, the non-mistaken party cannot treat the mistaken party as having agreed to the term. Absent such knowledge, however, the position is otherwise because it would give rise to intolerable uncertainty in contractual arrangements if a party could be permitted to assert its own subjective view that it had operated under a mistake, even though there appeared objectively to be a concluded contract and the non-mistaken party was fairly operating on that basis.

82 Significantly, for the relevant mistake to void the contract, it must be about a *term* of the contract, and cannot merely be a mistaken assumption about the circumstances under which the contract was or would be concluded. A contract can be concluded as long as the contracting parties agree as to its terms, regardless of their beliefs and assumptions about the contract. This proposition

was alluded to in the decision of *Smith v Hughes* (1871) LR 6 QB 597 ("*Smith v Hughes*").

83 In *Smith v Hughes*, the plaintiff farmer sued the defendant racehorse trainer for breach of a contract for the sale of oats. The plaintiff had given the defendant's manager a sample of the *new* oats that he intended to sell and the defendant agreed to purchase those oats of which he received a sample. The defendant subsequently refused to complete the contract on the ground that the contract had been for the sale and purchase of *old* oats. At the trial, it was disputed whether the plaintiff and the defendant's manager discussed the subject of the oats being old oats. At the end of the trial, the judge put two questions to the jury: (a) whether the word "old" had been used with reference to the oats in the conversation between the plaintiff and the defendant's manager; and (b) whether the plaintiff had believed that the defendant believed that he was contracting for old oats. The judge directed the jury to find for the defendant if either question was answered in the affirmative. The jury found for the defendant but did not give specific answers to the two questions.

84 On appeal, the court held that the judge's direction in respect of the first question was correct. However, it found that the judge's direction in respect of the second question was either wrong or likely to be misunderstood by the jury, and a new trial was therefore necessary. In the words of Hannen J, for the jury to find for the defendant pursuant to the second direction, "the jury should find not merely that the plaintiff believed the defendant to believe that he was buying old oats, but that he believed the defendant to believe that he, the plaintiff, was *contracting* to sell old oats" [emphasis added] (*Smith v Hughes* at 611).

85 The decisions of Cockburn CJ and Blackburn J too illustrate the point that the relevant mistake to void a contract, on the basis of unilateral mistake,

had to be about a *term* of the contract, and not merely about the circumstances under which the contract was or would be concluded.

86 Blackburn J put it in these terms at 606–607:

> … on the sale of a specific article, unless there be a warranty making it part of the bargain that it possesses some particular quality, the purchaser must take the article he has bought though it does not possess that quality. … *even if the vendor was aware that the purchaser thought that the article possessed that quality*, and would not have entered into the contract unless he had so thought, still the purchaser is bound, unless the vendor was guilty of some fraud or deceit upon him, and that a mere abstinence from disabusing the purchaser of that impression is not fraud or deceit … [emphasis added]

87 Cockburn CJ identified "the fallacy of confounding what was merely a *motive* operating on the buyer to induce him to buy with one of the essential *conditions* of the contract" [emphasis added] (at 606). If a contracting party made a mistake about the circumstances under which the contract was or would be concluded, *caveat emptor* would apply, and the contract would not be vitiated so long as the parties did reach an agreement on the *terms* of the contract. In emphasising this point, Cockburn CJ also observed that "the passive acquiescence of the seller in the self-deception of the buyer [in thinking that the oats were old oats]" would not entitle the buyer to avoid the contract (*Smith v Hughes* at 602–603).

88 The requirement that the relevant mistake to void a contract on the basis of unilateral mistake must concern a *term* of the contract was also applied more recently in the decision of the English High Court in *Statoil ASA v Louis Dreyfus Energy Services LP (The "Harriette N")* [2008] 2 Lloyd's Rep 685 ("*Statoil*"). In *Statoil*, the relevant question was whether a contract of compromise between the parties was binding on the claimant when its employee had made an error in calculating the amount of demurrage due from the defendant, because the

claimant's employee thought that the vessel in question had completed discharging her cargo on 13 October 2006 when in fact she only completed discharging on 24 October 2006. Prior to concluding the contract of compromise, the defendant's employee realised that the claimant's employee made this error but opted to say nothing about it. Aikens J held that it was *not a term* of the contract that the compromise was reached on the premise that the discharge had been completed on 13 October 2006 (at [91]). He accordingly held that there was no operative unilateral mistake as to a term of the contract, which therefore remained binding. Citing *Smith v Hughes* in coming to his decision, Aikens J framed the relevant proposition of law as follows (*Statoil* at [88]):

> … if one party has made a mistake about a fact on which he bases his decision to enter into the contract, but *that fact does not form a term of the contract* itself, then, *even if the other party knows that the first is mistaken as to this fact*, the contract will be binding. … [emphasis added]

89 We turn next to the rationale behind the doctrine of unilateral mistake in equity. We held in *Digilandmall.com* that we have an equitable jurisdiction with regard to unilateral mistake and that this jurisdiction exists to assist us in achieving the ends of justice in appropriate cases (see *Digilandmall.com* at [74] and [77]). To invoke this jurisdiction, it must be shown that the non-mistaken party had constructive knowledge of the mistaken party's mistake and further, that it was *unconscionable for the non-mistaken party to insist on the performance of the contract* because it had engaged in some unconscionable conduct or sharp practice in relation to that mistake (see *Digilandmall.com* at [80] and [83]).

90 There is a question as to whether unilateral mistake in equity can extend beyond a mistake as to a term of the contract, and related to this, whether a

mistaken assumption about the circumstances under which the contract was or would be concluded can itself be an operative mistake. The English authorities seem to suggest, on balance, that there is no equitable jurisdiction to vitiate a contract for unilateral mistake and if there were, they appear to doubt whether it extends beyond a mistake as to a term of the contract: see *Chitty on Contracts* (H G Beale gen ed) (Sweet & Maxwell, 33rd Ed, 2018) ("*Chitty*") at para 3-027; Edwin Peel, *The Law of Contract* (Sweet & Maxwell, 14th Ed, 2015) at para 8–058; Jack Beatson, Andrew Burrows & John Cartwright, *Anson's Law of Contract* (Oxford University Press, 29th Ed, 2010) at p 278; see also *Clarion Ltd and Others v National Provident Institution* [2000] WLR 1888 at 1905C–1905H; *Great Peace Shipping Ltd v Tsavliris Salvage (International) Ltd* [2003] QB 679; *Huyton SA v Distribuidora Internacional de Productos Agricolas SA de CV* [2003] 2 Lloyd's Rep 780; *Statoil*. The High Court of Australia in *Taylor v Johnson* (1983) 151 CLR 422 treated relief for unilateral mistake as to a fundamental term as equitable in character; see also N C Seddon & R A Bigwood, *Cheshire and Fifoot Law of Contract* (LexisNexis Butterworths, 11th Australian Ed, 2017) at para 12.44 in which it is said that an equitable principle of mistake has probably displaced any possible common law doctrine of mistake.

91 As for the position in Singapore, although there is a recognised equitable jurisdiction for dealing with unilateral mistake, the question as to whether this extends beyond a mistake as to a term of the contract remains open. In *Digilandmall.com*, the mistake in question was undoubtedly one as to a fundamental term of the contract, namely the price, and there was no detailed discussion about whether any other type of mistake could be relied upon to invoke the defence (see *Digilandmall.com* at [34] and [80]). It is true that in *Digilandmall.com*, the court did go on to observe that "[o]ne suggested way" to

differentiate between unilateral mistake at common law and in equity would be to hold that the former was "limited to mistakes with regard to the subject matter of the contract", while the latter "[could] have regard to a wider and perhaps open-ended category of 'fundamental' mistake" (at [75]). This, however, was not explored or developed in detail.

92 The issue of whether unilateral mistake in equity can extend beyond a mistake as to a term of the contract was not fully argued before us. In addition, we are satisfied that it is not necessary for us to determine this question in this case. Even on the Judge's view of the relevant belief (the Second Mistaken Belief) being treated as a mistake for the purposes of the equitable jurisdiction, there are the further requirements of constructive knowledge of the mistake and unconscionability and those simply did not exist in this case.

93 If the doctrine of unilateral mistake is to be understood in terms of the principles governing offer and acceptance, or in other words, the formation of the contract, then, as Prof Goh suggested, the question of how the doctrine should apply to contracts made by computerised trading systems should be answered by first considering the more fundamental issue of *how* such contracts are formed. We therefore turn to consider this.

94 The decision of the English High Court in *R (on the application of Software Solutions Partners Ltd) v Her Majesty's Commissioners for Customs and Excise* [2007] EWHC 971 (Admin) ("*Software Solutions Partners*") is of some assistance. There, the court considered an automated electronic process of contracting involving the software of the applicant, Software Solutions Partners Ltd ("SSP"). Insurance brokers who used SSP's software could enter into insurance contracts on behalf of their customers with insurers who were using the same software. A broker would input the details for the required insurance

product into the software, which would calculate quotes available from those insurers based on pre-determined qualification criteria as agreed between the insurers and SSP, and also electronically determine whether the risk was acceptable to the insurers without referring it back to them. Once the customer accepted the price and terms of an insurance cover, the software would process the customer's data automatically and generate the relevant policy contract and the relevant insurer would be bound by it. All the information necessary for contract formation was pre-programmed in the software according to parameters laid down by the insurer. The court concluded in these circumstances that the insurer using the software had, expressly or impliedly, invited the insurance broker to use the software as the medium for contract formation and undertook to be bound by the automatically generated policy contract even if the insurer was temporarily unaware of it (see *Software Solutions Partners* at [65] and [67]). Put another way, the insurer made a binding offer to provide insurance and the broker, on the customer's behalf, could accept it and that would be effective when received by SSP's information system (see *Software Solutions Partners* at [19]).

95 The court in *Software Solutions Partners* analogised that case to *Thornton v Shoe Lane Parking Ltd* [1971] 2 QB 163 where Lord Denning MR discussed the situation of a customer putting money into an automatic machine and being issued with a ticket. There, Lord Denning MR held that the offer was made when the proprietor of the machine held it out as being ready to receive money and the customer accepted the offer by inserting money into the machine (at 169).

96 What is clear in our case is that the Trading Contracts had been entered into pursuant to the parties' respective deterministic algorithms. As was the case in *Software Solutions Partners* for the insurers using SSP's software, the

contracting parties and Quoine did not know beforehand that the Trading Contracts would be entered into; and they were also unaware of the specific terms on which the contracts would be concluded. These factors did not prevent the formation of the policy contracts in *Software Solutions Partners*, and, in our judgment, did not here prevent the formation of a contract at the point of time when an offer made by one algorithm was accepted by the other.

97 This was also the view of the Judge and it drove him, in our judgment, inevitably, to adopt a certain analytical model when considering the issue of unilateral mistake. Specifically, he refused to consider the matter by reference to what the position would have been and what the contracting parties were likely to have known, intended and agreed had they had face-to-face negotiations at a hypothetical meeting on the "floor of the exchange" to enter into the Trading Contracts, at the time these were entered into, because this was simply not how they had agreed to form their contracts. Instead, they had decided to form contracts using the relevant deterministic algorithms (see Judgment at [200] and [204]). We agree with this characterisation of the parties' method of contracting and we think it would be wholly artificial to recast the relevant matrix of fact, which was one where the contracting parties did not in fact know beforehand that they were going to enter into the Trading Contracts or their terms, and were content to abide by what the relevant algorithms did at least as long as this was within the ambit of their programmed parameters. We also agree with the Judge that it follows from this that in cases where contracts are made by way of *deterministic* algorithms, any analysis concerning knowledge of a mistake or unconscionably taking advantage of one must be done by reference to the state of mind of the programmers of the algorithms at the time of the programming (see Judgment at [211]).

98 As we have noted at [15] above, a deterministic computer program or algorithm is bound by the parameters set by the programmer, and can (and generally will) only do what the programmer has programmed it to do. Given a particular input, it will produce a particular output; on each occasion, the output should and will be the same if the former does not change. Therefore, when it comes to assessing the state of knowledge that is to be attributed to the parties at the time of a contract made by way of deterministic algorithms, the relevant inquiry cannot be directed at the parties themselves, who had no knowledge of or direct personal involvement in the formation of the contract. Rather, working backwards from the output that emanated from the programs, we are driven to assess the relevant state of knowledge by examining that of *the programmers*. This approach is consistent with that which was advocated by Prof Goh.

99 Apart from determining whose knowledge is relevant, it is also important to consider the relevant *time* for assessing that person's knowledge. In our judgment, the relevant time frame within which we should assess the knowledge of a programmer or the person running the algorithm would be from the point of programming up to the point that the relevant contract is formed. As Prof Goh noted, the point of programming is when the programmer's knowledge is the most concretised. The question can first be framed in this way: if the algorithm was programmed to produce a particular output, *why* was this done? But the inquiry cannot end there and must extend past that point of time because there may be situations where a programmer or the person running the algorithm who did not contemplate the relevant mistake at the point of programming came to learn of it subsequently *before* the contract had been formed, and yet allowed the algorithm to continue running, intending thereby to take advantage of the mistake. In such a case, it would be wrong to ignore the

subsequent acquisition of knowledge. This is why it is appropriate to have regard to the state of knowledge up to the time of the contract.

100 Prof Goh cited Nik Yeo & Joseph Farmer, "Mapping the Landscape: Cryptocurrency Disputes under English Law (Part 2)" (2019) 5 JIBFL 290 at p 291. This was a commentary on the Judge's decision in which the authors note as follows:

> An issue to which the case gives rise is an apparent timing mismatch: the traders' mistakes must necessarily have arisen, or at least have been continuing, at the point of the original trades, whereas the last human input into the programming must by practical necessity have occurred *before* those trades. *How then could the state of mind of the programmer when originally programming B2C2's "deep price" methodology ever include knowledge of the relevant mistake?* … the law might need to recognise that so long as the knowledge or intention of the original programmer was that there ought not to be the sort of mistake which subsequently arose, then it does not matter for the rules of unilateral mistake if the particular instantiation of that mistake post-dates the last act of a human being, so long as the programmer's state of mind could be said still to be extant at the time the mistake is made (in other words, that the code has not changed by then in a way which would be inconsistent with that state of mind). [emphasis added]

101 We also note that *Low & Mik* ([75] *supra*) made some similar points in commenting on the Judge's decision as follows:

> … Being unaware of the conclusion of a contract, a contracting party utilising automated contracting is *ipso facto* incapable of having any actual knowledge of any mistake on the part of its counterparty at the time of contracting, however egregious the mistake. But this would have the effect of immunising any contracting party employing algorithmic contracting from the doctrine of unilateral mistake entirely, which cannot be correct. …
>
> … it is unrealistic to attempt to attribute knowledge of a future mistake to a past programmer a la Nostradamus. …

102 We have two observations on these extracts. The first relates to the level of knowledge of the mistake while the second relates to the time when the knowledge is assessed. Turning to the first point, it is true that it may be artificial, even unrealistic, to conduct the analysis on the basis of an expectation that the non-mistaken party must have knowledge of the specific and precise details of the mistake that has arisen. Programmers are not expected to be prophets and mistakes can take a wide range of forms. But the law on unilateral mistake is concerned:

(a) with a type or class of mistake, that is one concerning the fundamental terms of the contract (at least at common law); and

(b) with the mental state of the non-mistaken party – whether it knew (or ought to have known) of the (type of) mistake and was acting to take advantage of it.

103 In our judgment, keeping the focus on these considerations enables us to address the authors' concern that the state of mind of the programmer when originally programming the algorithm could never have included knowledge of the particular manifestation of the relevant mistake. That is not and should not be the inquiry and we do not think it was the inquiry that the Judge pursued. Rather, the relevant inquiry might be framed thus: when programming the algorithm, was the programmer doing so with actual or constructive knowledge of the fact that the relevant offer would only ever be accepted by a party operating under a mistake and was the programmer acting to take advantage of such a mistake? In our judgment, this was the essential methodology applied by the Judge at [229]–[230] of the Judgment, which we set out at [124] below.

104 The second point which pertains to timing is resolved by the approach that we have set out at [99] above. If at the point of programming, the programmer contemplated or ought to have contemplated that a mistake might arise on the part of a counterparty to a future contract and designed the algorithm to exploit such a mistake, then it does not matter for the purposes of establishing the requisite knowledge that the relevant mistake had occurred *after* the algorithm had been programmed. Further, as we have noted, the framework we have developed also enables the court to examine and consider the knowledge actually acquired after the point of programming and the actual conduct of the parties up to the time of the contract. However, we emphasise that this is directed at *actual* conduct. This is to be contrasted with the approach that Quoine urged upon us, which we have rejected (see [97] above), which was to analyse the matter by reference to a "hypothetical meeting on the trading floor that notionally took place just before the contract was concluded in the light of the information available at that time". On that approach, the question posed is whether the parties *would have agreed* to the contract with knowledge of the mistake. With respect, this is, as we have mentioned, a wholly artificial analysis that has no relation to the reality of the situation, which is that the trades were conducted by way of algorithmic trading and not by way of an imagined meeting on some trading floor. The consequence of this is that the parties had *committed* to transact with each other in a certain way which entailed that they would not even know whether a contract would be formed, and if it were, on what terms that would be, *and* they chose in these circumstances not to bargain for a right to review, confirm or invalidate any ensuing contract that might emerge out of the arrangements that they had committed to. This simply did not accommodate the court artificially (or "equitably") interposing another last look at the proposed terms immediately prior to the algorithms concluding the contract and, for that matter, still less *after*. Having committed to transact in this way, and in

the absence of any basis upon which equity's intervention could be justified up to the time the relevant offer was accepted and the contract formed, we cannot see a principled basis for such intervention premised on a review of the reasonableness of the ensuing contract *after* it had been formed without any mistake as to its terms.

105 We turn to the *type* of knowledge required on the part of the non-mistaken party of the mistaken party's mistake, which, as stated at [80] above, differs depending on whether a party is seeking to invoke the doctrine of unilateral mistake at common law or in equity. The former requires proof that the non-mistaken party had *actual* knowledge of the mistake at the time of the contract, while the latter requires *constructive* knowledge (coupled with an element of unconscionability). The distinguishing line between actual knowledge and constructive knowledge can be difficult to draw, if not in theory then in practice. This is not least because both forms of knowledge require the court to adopt an objective inquiry (see *Digilandmall.com* at [44]; *Wellmix Organics (International) Pte Ltd v Lau Yu Man* [2006] 2 SLR(R) 117 at [66]).

106 The test for establishing actual knowledge is set out in *Digilandmall.com* at [41]–[42] as follows:

> 41 As is so often alluded to in the cases, in the absence of an express admission or incontrovertible evidence, the fact of knowledge would invariably have to be inferred from all the surrounding circumstances, *including the* ***experiences and idiosyncrasies*** *of the person and what* ***a reasonable person*** *would have known in a similar situation. If a court, upon weighing all the circumstances, thinks that the non-mistaken party is* ***probably aware*** *of the error made by the mistaken party, it is entitled to find, as a fact, that the former party has actual knowledge of the error.* Following from that holding, the court should declare the contract so formed as void on the ground of unilateral mistake.
>
> 42 In order to enable the court to come to the conclusion that the non-mistaken party had actual knowledge of the

> mistake, *the court would go through a process of reasoning where* ***it may consider what a reasonable person, placed in the similar situation****, would have known.* In this connection, we would refer to what is called "Nelsonian knowledge", namely, wilful blindness or shutting one's eyes to the obvious. Clearly, if the court finds that the non-mistaken party is guilty of wilful blindness, it will be in line with logic and reason to hold that that party had actual knowledge.
>
> [emphasis added]

107 Actual knowledge is concerned with the *subjective* knowledge of the non-mistaken party. In other words, for actual knowledge to be made out, it must be shown that the non-mistaken party actually knew of the relevant fact. However, the means by which the *subjective* knowledge of the non-mistaken party is ascertained may include considerations of the matter from an objective perspective. This was consistent with the approach that Prof Goh urged upon us at para 137 of his submissions on the mistake issue:

> What is the criterion to be applied in so far as the ascertainment of the presence of knowledge … is concerned? **The answer would appear, by the very nature of the doctrine itself, to hinge upon the subjective knowledge of the party concerned.** However, it is submitted that such "subjective knowledge" must be **objectively ascertained**, and, indeed, the case of *Hartog v Colin & Shields* [[1939] 3 All ER 566] supports this proposition. In that case, the reference to verbal and written negotiations prior to the sale concerned as well as expert evidence as to the prevalent trade practice … tilted the decision in favour of the defendant sellers who, Singleton J decided, had obviously made a mistake which was equally clear to the plaintiff buyer, having regard to the *objective facts* just mentioned. As Singleton J observed:
>
> > "[T]here was an accident. The offer [by the defendant sellers] was wrongly expressed, and the defendants *by their evidence, and by their correspondence*, have satisfied me that the plaintiff could *not reasonably* have supposed that that offer contained the [defendants'] *real* intention."
>
> [emphasis in original in italics; emphasis added in bold; footnotes omitted]

108 In contrast to actual knowledge, constructive knowledge involves *imputing* knowledge to the non-mistaken party. The inquiry is not directed at whether the non-mistaken party *actually* knew of the mistaken party's mistake, but whether a reasonable person in the position of the non-mistaken party would have known of the mistake. If the answer to that is yes, then the non-mistaken party is *deemed* to have constructive knowledge of the mistake, notwithstanding that it could not be proved that it did indeed have that knowledge. Here the inquiry that is adopted by the court is necessarily an objective one.

109 The final requirement to establish unilateral mistake in equity is that the non-mistaken party must also be found to have engaged in some *unconscionable* conduct in relation to the relevant mistake. In *Digilandmall.com*, this was also referred to as "sharp practice" and "impropriety" (see *Digilandmall.com* at [77] and [80]). Much more recently, in *BOM v BOK and another appeal* [2019] 1 SLR 349 ("*BOM*"), we elaborated on what constitutes "unconscionable conduct" although this was not in the context of unilateral mistake in equity. In *BOM*, we were required to consider the circumstances in which a deed of trust might be set aside on the basis of unconscionability, and in that context held that "the narrow doctrine of unconscionability" [original emphasis omitted] applies in Singapore (at [142]):

> … To invoke the doctrine, the plaintiff has to show that he was suffering from an infirmity that the other party exploited in procuring the transaction. Upon the satisfaction of this requirement, the burden is on the defendant to demonstrate that the transaction was fair, just and reasonable. In this regard, while the successful invocation of the doctrine does not require a transaction at an undervalue or the lack of independent advice to the plaintiff, these are factors that the court will invariably consider in assessing whether the transaction was improvident.

In relation to the requirement for the plaintiff to be suffering from an infirmity, this refers to the plaintiff being poor and ignorant or suffering from other forms

of infirmities of sufficient gravity, whether physical, mental and/or emotional in nature, as to have acutely affected his ability to "conserve his own interests" (*BOM* at [141]). Admittedly there is a potential tension between requiring, on the one hand, that unconscionability be shown, this necessarily being a subjective inquiry premised on what the non-mistaken party actually knew – see *Digilandmall.com* at [78] – and, on the other, that the non-mistaken party have at least constructive knowledge of the mistake, this being, as we have already noted, an objective inquiry.

110 Aside from this, a narrow conception of unconscionability limits excessive subjectivity in determining what amounts to unconscionable conduct, and instead promotes certainty and predictability for contracting parties (see *BOM* at [176]). Given the circumstances of this case, and for reasons we will shortly develop, we consider that we would not on any footing have been able to find that there was unconscionable conduct on the part of B2C2 or Mr Boonen, and thus it is not necessary for present purposes either to resolve the tension we have alluded to or to decide the question as to whether the same narrow conception of unconscionability should apply in the context of unilateral mistake in equity. We therefore leave this open for the present.

111 Further, it is also relevant when considering unilateral mistake in equity to have regard to the degree of carelessness or negligence on the part of the mistaken party to determine where the equities fall, even if a mistaken party's carelessness would not in and of itself disentitle it from relief (*Digilandmall.com* at [79]).

Application to the facts of this case

112 On appeal, Quoine focused on the Second Mistaken Belief as the operative mistake held by the Counterparties, which was that they believed they were buying ETH for BTC under contracts at prices which accurately represented or did not deviate significantly from the true market value and/or price of ETH relative to BTC on 19 April 2017 (see [38] above). Quoine argued that Mr Boonen had actual or at least constructive knowledge of the Second Mistaken Belief, because his main objective in programming the Trading Software to place sell orders for ETH at the deep price of 10 BTC to 1 ETH when the Platform's order book became empty or abnormally thin was to unconscionably profit from potential errors of the other market participants. Against this, B2C2 submitted that there was no mistake as to the prices quoted and accepted for the Disputed Trades, and that Mr Boonen had not engaged in any unconscionable conduct when programming the Trading Software.

113 To recapitulate, B2C2 had through its algorithm placed sell orders for ETH on the Platform at prices of 9.99999 BTC and 10 BTC to 1 ETH. On the other side of the transactions, orders had been placed on behalf of the Counterparties to buy ETH at the best available price on the Platform. These orders had been placed by the Platform's operating system, which had done just as it had been programmed to do in the light of the conditions presented on the Platform. These were the two sides of the trades that were matched and resulted in the Trading Contracts.

114 It is helpful to pause here and examine the position a little more closely. Because the Trading Contracts had been entered into pursuant to deterministic algorithmic programs that had acted exactly as they had been programmed to act, it is not clear what mistake can be said to have affected the formation of the

contracts. The mistake, if anything, was in the way the Platform had operated as a result of Quoine's failure to make certain necessary changes to several critical operating systems, which led to a series of steps that force-closed the Counterparties' positions and triggered buy orders for ETH being placed on their behalf. This might conceivably be seen as a mistake as to the premise on which the buy orders were placed, but it can in no way be said to be a mistake as to the terms on which the contracts could or would be formed. If a party A is told a falsehood by B which causes A to accept C's offer to transact at a price A would not otherwise have transacted at, in circumstances where C was neither aware of nor involved in B's falsehood, we are unable to see how that falsehood can be said to be a mistake that vitiates the contract. Here, the problems with the Quoter Program and the subsequent force-closure of the Counterparties' positions are akin to a "falsehood" told by Quoine to the Counterparties. This cannot be a mistake that vitiates the Trading Contracts between B2C2 and the Counterparties.

115 Accordingly, although we find no reason to disagree with the Judge's finding that the Counterparties held the Second Mistaken Belief that they were buying ETH for BTC at prices which did not deviate significantly from the market price on 19 April 2017 (see Judgment at [228]), we respectfully disagree that this mistake was as to a *term* of the Trading Contracts. The Second Mistaken Belief was characterised as a mistake as to the prices at which the Trading Contracts were entered into. In our judgment, this was incorrect. The prices that the Disputed Trades were concluded at were arrived at by operation of the parties' respective algorithms, and it was common ground that these had operated as they were meant to. In fact, the precise mistake in this case was a mistaken *assumption* on the part of the Counterparties as to how the Platform would operate. In other words, their real belief was that the Platform would not

fail; and as the Judge found, the premise for the Second Mistaken Belief was that the Platform would either always operate as intended or, alternatively, there would be adequate error identification and protection systems to prevent trading from continuing if the Platform operations deviated from this assumed state of affairs (Judgment at [227]). However, we do not see how this can assist Quoine because the Second Mistaken Belief was not a mistake as to the terms of the Trading Contracts, but instead was a mistaken assumption as to the circumstances under which the Trading Contracts would be concluded. This is not an operative mistake at least in the context of unilateral mistake at common law. In this regard, the position of the Counterparties (with their mistaken assumption) is analogous to the position of the claimant in *Statoil*, where the court found that there was no operative unilateral mistake as to a contract term and the contract of compromise in question thus remained binding (see [88] above). In fact, the claimant in *Statoil* would, on the face of things, seem to have been in a better position than the Counterparties in the present case, because the defendant in *Statoil* was actually aware that the claimant had entered into the contract on a mistaken assumption; in contrast, as we discuss below, Mr Boonen did not have actual or constructive knowledge of the Second Mistaken Belief (see [126] below).

116 In a sense, this might be sufficient to dispose of the case on unilateral mistake (at least at common law). However, since we have left open the issue identified at [92] above, we proceed on the assumption that there was an operative mistake, and examine whether the non-mistaken party, B2C2, had the requisite knowledge of this mistake.

117 In relation to B2C2, the Judge made the following findings:

(a) There was plainly no mistake on B2C2's part in designing its algorithm to place the sell orders on the Platform at the deep price.

(b) There was no sinister motive behind Mr Boonen programming the Trading Software with the deep prices. Specifically, at the time the Trading Software was designed, the deep prices had *not* been programmed with either the awareness or the intention to take advantage of a mistaken bid by a counterparty or to enter into a contract on that basis.

118 Quoine did not (and plainly could not) challenge the first finding and although it mounted a challenge of sorts against the second finding, we consider that this challenge was bound to fail. The Judge gave detailed reasons for his findings and there is neither reason nor basis for us to overturn those findings. In this regard, we are cognisant of our position as an appellate court. We did not have the benefit of hearing the parties' evidence at trial or grappling with the minutiae of that evidence as the Judge did, and thus appropriate caution demands that we should be slow to overturn primary findings of fact made by the Judge. In any event, we accept the Judge's findings for the following reasons.

119 First, there were no grounds for concluding that Mr Boonen had ever turned his mind to the relationship between the margin traders and those who loaned them money (Judgment at [124] and [223]). It is difficult to see how Quoine could even begin to mount a challenge against this finding. It was not suggested that the deep prices were programmed with margin trades in mind. If Mr Boonen did not programme the deep prices with awareness or consideration of the terms on which margin trading was done, he could not have programmed the Trading Software with the *knowledge* that in situations of illiquidity on the

Platform when the order book was abnormally thin, margin calls would be triggered and market orders would be placed to purchase ETH at the best available price, thereby creating an opportunity for exploitation.

120 Second, the Judge accepted that the programming of the deep prices was in part to ensure that the PureQuote strategy would always have price inputs so that the Trading Software would function continuously (see [18] above), and in part to ensure that in the unlikely event that a trade were to occur at a deep price, it would adequately protect B2C2 against any adverse consequences of such a trade (see Judgment at [83] and [85]). The Judge acknowledged that Mr Boonen's strategy might not have been wholly defensive, but nevertheless held that the overriding reason for programming the deep prices was to protect B2C2 in the event of the unexpected happening (see Judgment at [119] and [230]).

121 Third, the Judge accepted that when Mr Boonen designed the Trading Software, he knew of the *possibility* that the Platform's order book might become empty and that in that event the deep prices would be inserted into the Trading Software's internal order book. However, the Judge also stated that Mr Boonen had never considered that there was a *real* possibility of orders placed on the Platform at the deep prices being filled. Mr Boonen in fact considered that this was unlikely and the Judge found that he did not turn his mind in any detail to the circumstances in which this might happen (Judgment at [121] and [123]).

122 The first finding at [117(a)] above is fatal to any argument resting on common mistake since it is plain that B2C2 was never acting under a mistake (see [129] below).

123 The second finding at [117(b)] above, in our judgment, is fatal to any argument resting on unilateral mistake. This is because it excludes any notion of the Trading Contracts having been concluded in circumstances where B2C2 either actually knew or must be taken to have known that these had been or must have been the result of a mistake having been made by either of the Counterparties. This follows from the analysis of the law that we have set out above. Further, as we have observed at [42] above, the Judge also accepted that Mr Boonen had no knowledge of the glitches causing the illiquidity on the Platform until after the Disputed Trades had been transacted.

124 Following from our analysis of the law at [103] above, the relevant inquiry in this case could be framed thus: when programming the Trading Software with the deep prices, was the programmer doing so with actual or constructive knowledge of the fact that sell orders at those prices would only ever be accepted by a party operating under a mistake and was the programmer acting to take advantage of that mistake? In our judgment, this was the essential methodology applied by the Judge at [229]–[230] of the Judgment and which led him to conclude that Mr Boonen neither had such knowledge nor programmed the Trading Software to take advantage of any such mistake:

> 229 It is next necessary to determine whether Mr Boonen had actual knowledge of the mistaken belief at the time he inserted the deep prices … Can it be said that Mr Boonen knew that "it was never contemplated by [any trader] that any trades would be transacted on the Platform at prices which deviated so substantially from the actual market prices"? This amounts to a belief held by Mr Boonen at that date *that the price was so abnormal that no trader would trade at that price otherwise by way of a mistake.*
>
> 230 … I have concluded on the basis of those findings of fact that Mr Boonen did not insert the deep prices with that belief. He foresaw that a number of factors might arise which would cause the deep prices to be inserted and the overriding reasons for them being inserted was to protect B2C2 in the event of the unexpected happening. He did not exclude the possibility of

> trades at those prices being executed. Whilst he was aware that one possible cause was that it could be the result, wholly or in part, of some error or omission on the part of someone, including himself, he did not turn his mind in any detail to the circumstances that might lead to such trades being executed. He knew that the Platform was an automated system and that therefore no opportunity would arise for any particular trade to be reviewed by the parties in advance. In the circumstances of this case, in order for him to have actual knowledge that other traders believed that in no circumstances would a trade be transacted on the Platform at prices which deviated so substantially from the actual market prices, I consider that it would be necessary for it to be demonstrated that he held that belief himself, which he did not …
>
> [emphasis added]

125 We have also observed above at [99] that the programmer's knowledge, or indeed the knowledge of anyone running the algorithm, is relevant *past* the point of programming, and up till the Disputed Trades occurred. Examining the state of B2C2's knowledge at this later point in time, however, we consider that Quoine could not establish or adduce any evidence to show that B2C2 and/or Mr Boonen had become aware of the problems with the Quoter Program or the fact that the Platform's order book had gradually thinned out in the period *after* the Trading Software had been programmed and *prior* to the Disputed Trades (which was when the Trading Contracts were entered into). Quoine did seek to rely on the email that was sent by Mr Boonen on 20 April 2017, the morning *after* the Disputed Trades had occurred but in our view, this does not help its case at all. That email simply stated in the subject line "Major Quoine database breakdown, please call us urgently". Quoine argued that Mr Boonen's reaction showed that he knew that there must have been some mistake. However, this, at its highest, showed Mr Boonen's state of mind *after* he became aware of the Disputed Trades, which is not part of the relevant time frame. Further, the email, if anything, supports the Judge's finding that Mr Boonen did not programme the Trading Software with the deep prices with any sinister intent, because his

reaction was simply inconsistent with that of a man who had anticipated the possibility of such a mistake occurring and designed his algorithm to exploit it.

126 Taking the evidence above together, it is apparent to us that Mr Boonen did not have actual or constructive knowledge of the Second Mistaken Belief. Mr Boonen would have had to foresee a perfect storm of events that began with the problems with the Quoter Program and ended with the Disputed Trades being concluded at the deep price for him to have had, or be taken to have had, the Second Mistaken Belief. Despite Quoine's considerable efforts to mount a case suggesting even a hint of this, there was simply no evidence to suggest that Mr Boonen had ever contemplated anything of the sort. We therefore reject Quoine's case on this aspect of the appeal.

127 We add for completeness that the second finding of the Judge described at [117(b)] above, that there was no sinister motive behind programming the Trading Software with the deep prices, also excludes any notion of the Trading Contracts having been entered into in circumstances where B2C2 had acted unconscionably. We find no reason to disagree with the Judge's finding that although Mr Boonen's inclusion of the deep prices was an opportunistic business decision, it was not motivated by sinister intent (Judgment at [236]).

128 For all these reasons, we are satisfied that Quoine's defences of unilateral mistake at common law and in equity fail.

Issue (d): Common mistake

129 Quoine also argued that the Trading Contracts were void for common mistake, since B2C2 and the Counterparties had entered into the Disputed Trades under a shared mistaken assumption that they were transacting at or around the going market rate for ETH. However, B2C2 could not have been

labouring under such an assumption, given that it had placed its sell orders for ETH at prices of 9.99999 BTC and 10 BTC to 1 ETH on the Platform *because* the *intentionally* pre-programmed deep price of 10 BTC to 1 ETH in the PureQuote strategy took effect (see [117(a)] above). Therefore, Quoine's defence of common mistake at common law fails.

Issue (e): Unjust enrichment

130 We turn to Quoine's argument that it was entitled to cancel the Disputed Trades on the basis that B2C2 would otherwise be unjustly enriched at the expense of the Counterparties and/or Quoine. Quoine's and B2C2's arguments on unjust enrichment hinged on whether we accepted that the Trading Contracts were vitiated for mistake. If the Trading Contracts remained valid and enforceable, that would seem to bar any action in unjust enrichment.

131 In his discussion of the unjust enrichment point below, the Judge applied our decision in *Singapore Swimming Club v Koh Sin Chong Freddie* [2016] 3 SLR 845 at [90], which sets out the three requirements for an action in unjust enrichment to succeed: (a) a benefit has been received or an enrichment has accrued to the defendant; (b) the benefit or enrichment is at the claimant's expense; and (c) the defendant's enrichment is unjust.

132 As a preliminary point, we agree with the Judge's conclusion that if the Disputed Trades were not cancelled, B2C2 would stand to receive a substantial benefit in terms of the considerable value of BTC that had been credited into its account. However, as the Judge noted, this benefit would have been at the expense of the *Counterparties*, which would have had to make up the shortfall between the BTC actually in their accounts and the amount that had been debited from their accounts pursuant to the Disputed Trades. Therefore, the

cause of action in unjust enrichment should if at all vest in the Counterparties, and not Quoine. However, B2C2 did not attempt to strike out this aspect of Quoine's defence, and the Judge therefore proceeded with the trial on the basis that it was properly raised as a defence. We therefore proceed on the same basis.

133 As to the first element, there is no doubt that B2C2 was enriched or derived a benefit from having the proceeds of the Disputed Trades credited into its account. Assuming that the Counterparties are able to bring a claim against Quoine for the losses they might suffer as a result of the Disputed Trades if the Trading Contracts remain valid and enforceable, it might then be said that B2C2's enrichment was at least indirectly at the expense of Quoine. On this basis, the first two requirements of unjust enrichment would be made out. We turn then to the last requirement, which is that there must be an unjust factor.

134 The unjust factors that were pleaded by Quoine were first, that the benefit was conferred upon B2C2 pursuant to a mistake, and second, that there was a lack of consent in the formation of the Trading Contracts by which B2C2 was enriched. In truth, these were the same points raised in relation to the case on unilateral mistake, which we have rejected.

135 Further, given our conclusion that the Trading Contracts are not vitiated, B2C2's enrichment would have been pursuant to valid contracts and it is difficult to see how this could be said to be unjust. As stated in *Goff & Jones: The Law of Unjust Enrichment* (Charles Mitchell, Paul Mitchell & Stephen Watterson eds) (Sweet & Maxwell, 9th Ed, 2016) at para 9–94 (see Judgment at [249]):

> Where a benefit is mistakenly conferred by one party on another *under a contract*, a claim in unjust enrichment will commonly fail *even if the mistake would otherwise support such a claim*. … the contract will bar the claim, to the extent *that it entitles the*

> *defendant to receive the relevant benefit.* For the claim to succeed, the claimant will need to show that the contract is invalid, being either non-existent, void or voidable. … [emphasis added]

136 Therefore, we are satisfied that Quoine's defence of unjust enrichment cannot succeed.

Issue (f): The trust question

137 Finally, we turn to B2C2's contention that Quoine was holding the BTC which was credited into B2C2's account pursuant to the Disputed Trades on trust and that Quoine breached that trust when it reversed that credit transaction. This raises the threshold issue of whether cryptocurrency, specifically BTC, is a species of property that is capable of being held on trust.

138 This point was not disputed by the parties when they were before the Judge and was only raised belatedly by Quoine on appeal. Nevertheless, the Judge briefly considered the question, and concluded that cryptocurrency satisfied all the requirements in the classic definition of a property right set out in the decision of the UK House of Lords in *Ainsworth* at 1248 (see [34] above). However, he left open the question of what the precise nature of the property right was, having been satisfied that cryptocurrency could be treated as property in a generic sense.

139 There have been some other cases in the Commonwealth that have implicitly accepted that cryptocurrency may be regarded as property, although we are not aware of any court that has attempted to identify the precise nature of the property right if any. In *Elena Vorotyntseva v Money-4 limited and others* [2018] EWHC 2596 (Ch), the English High Court issued a proprietary injunction preventing the removal of specific ETH and BTC holdings. In

coming to his decision, Birss J observed that there had been no suggestion that cryptocurrencies could not be a form of property.

140 In *Copytrack Pte Ltd v Wall* [2018] BCSC 1709, the Supreme Court of British Columbia ordered that some C$400,000 worth of ETH be traced, which suggests that ETH was recognised as a species of property susceptible to tracing. The action was brought by Copytrack Pte Ltd ("Copytrack"), a company engaged in the business of digital content management and automated copyright enforcement. Copytrack created its own cryptocurrency, Copytrack tokens, and mistakenly transferred a more valuable cryptocurrency, ETH, to the defendant investor instead of Copytrack tokens. The ETH was then transferred by the defendant to third parties. Copytrack sought to trace and recover the ETH. The court characterised the issue of whether the property law doctrines of conversion and wrongful detention could apply to cryptocurrencies as a "critical issue" and the "real issue on this application". While the court did not go so far as to rule on whether cryptocurrencies could, in fact, be subject to specific property law claims, the court held that it would be unreasonable and unjust in the circumstances to deny Copytrack a remedy, and so allowed Copytrack to trace and recover the wrongfully transferred ETH.

141 Academic commentators broadly agree that BTC may be regarded as a property right, although they disagree as to the precise nature of this right. In Jean Bacon *et al*, "Blockchain Demystified: A Technical and Legal Introduction to Distributed and Centralised Ledgers" (2018) 25(1) Rich J L & Tech 1, the authors suggest (at para 182) that holders of digital tokens such as BTC should be regarded as having a property interest at common law, because they hold a bundle of rights that include the right to control the token. This interest is identifiable through entries on the blockchain, can be transferred by entries of the blockchain, and has a high degree of permanence and stability.

142 To similar effect is Kelvin FK Low & Ernie GS Teo, "Bitcoins & Other Cryptocurrencies as Property?" (2017) (21) Singapore Management University School of Law Research Paper, where the authors argue that the property right relating to BTC is the right to have one's public BTC address appear as the last entry in the blockchain in relation to a particular BTC. Such a right provides exclusive control to the holder in the form of universal exigibility and can be seen as involving a true property transfer when one transfers BTC from one's public BTC address to another's BTC address.

143 Most recently, the UK Jurisdiction Taskforce ("UKJT") chaired by Sir Geoffrey Vos released its *Legal Statement on Cryptoassets and Smart Contracts* (November 2019), where it considered the question of whether English law would treat a particular cryptoasset as property. The UKJT defined cryptoassets as generally having the following characteristics (at para 31): (a) intangibility; (b) cryptographic authentication; (c) use of a distributed transaction ledger; (d) decentralisation; and (e) rule by consensus. The UKJT stated (at para 85) that cryptoassets have all the indicia of property, and that their novel or distinctive features as aforementioned do not disqualify them from being property. The UKJT also stated that cryptoassets are not disqualified from being property simply because they might not be classifiable either as things in possession or as things in action. The UKJT therefore concluded that cryptoassets could be treated, in principle, as property.

144 There may be much to commend the view that cryptocurrencies should be capable of assimilation into the general concepts of property. There are, however, difficult questions as to the type of property that is involved. It is not necessary for us to come to a final position on this question in the present case. This is because even if BTC were to be regarded as a species of property which is capable of being the subject of a trust, we are satisfied that B2C2's breach of

trust claim would fail because, contrary to what the Judge found, we consider that there was no certainty of intention to create a trust. In this regard, we agree with the observations made by French CJ in the High Court of Australia decision of *Korda v Australian Executor Trustees (SA) Ltd* (2015) 255 CLR 62 ("*Korda*"). French CJ stated that the process of ascertaining whether the necessary intention to create a trust should be imputed is "one of construction of the relevant text or oral dealings in their context" (*Korda* at [11]). He clarified that an intention is not to be imputed and a trust inferred "simply because a court thinks it is an appropriate means of protecting or creating an interest".

145 The Judge held that the "decisive factor" which led him to find that a trust had arisen over the BTC that had been credited into B2C2's account was that B2C2's assets were held separately as assets of an individual user of the Platform rather than as part of Quoine's trading assets. He regarded this as a "clear indication" that Quoine claimed no title to the user's assets and acknowledged that it was holding them to the order of the user who could demand withdrawal at any time (see Judgment at [145]). In our respectful view, the mere fact that Quoine's assets were segregated from its customer's cannot in and of itself lead to the conclusion that there was a trust. In *Vintage Bullion DMCC (in its own capacity and as representative of the customers of MF Global Singapore Pte Ltd (in creditors' voluntary liquidation)) v Chay Fook Yuen (in his capacity as joint and several liquidator of MF Global Singapore Pte Ltd (in creditors' voluntary liquidation)) and others and other appeals* [2016] 4 SLR 1248, we stated as follows at [61]:

> Counsel for Vintage … submitted at the hearing before us that the Company had in effect by its conduct made a declaration of trust over the sum representing the Unrealised Profits by computing the gains and losses in relation to the Unrealised Profits daily, and thereafter setting aside and segregating the funds. In our view, however, the concepts of segregation and trust need to be clearly distinguished. *The mere segregation of*

> *money into separate bank accounts does not equate to the creation of a trust and is not sufficient to establish a proprietary interest in those funds in anyone other than the account holder* … Put simply, *segregation is a necessary but not a sufficient condition* to give rise to an express trust over the Sums in favour of the Customers. What is further required is to establish that the Company had *the requisite certainty of intention for the funds to be held on trust* … [original emphasis omitted; emphasis added in italics]

146 In any event, the manner in which BTC was *actually* stored by Quoine in the cold storage wallet suggests that there was *in fact*, *no* segregation, which militates against the inference that it was being held on trust. The manner in which BTC was set aside for users of the Platform was explained by Mr Lozada as follows at the trial:

> Q. … even though the asset in the wallet is not specifically identifiable to each customer, Quoine has an internal book which identifies the amount of assets that are held to the credit of each customer; correct?
>
> A. Yeah, ***the database has each customer account has the balance***. It's like – ***think of it as a bank***. You have your US dollar and how much US dollar you hold in your account. That is in … Quoine's database.
>
> Q. Let's assume there were only 100 ETH in a cold storage wallet of Quoine, and you have 100 customers with a credit of 1 ETH each. Then, in a sense, you would be able to identify that 1 ETH belongs to each customer in the cold storage wallet; correct?
>
> A. We don't normally do that. We base our accounting on what we have in the database. As I said before, ***what's in the cold storage doesn't necessarily have to match what the customer balance has.*** As I explained, if we sell a [BTC] to a customer and the database gets updated, we will have to go and procure it. ***The database will say they own 1 [BTC] or 1 ETH. The wallet may have a different amount.***
>
> [emphasis added]

147 Given that the amount that was reflected in the account balance of a user of the Platform as it appeared on Quoine's database did not necessarily match

the amount in the cold storage wallet, it could not be said that Quoine was holding the amount stated in the user's account balance on trust. From Mr Lozada's explanation, it appears that the only amount which a user was concerned with was what was reflected on Quoine's database. The actual amount in the cold storage wallet did not matter because if there were insufficient assets to meet the account balance reflected in the database, Quoine would simply purchase the required amount from other sources to make up the shortfall. We find this arrangement to be more akin to deposits being made with a bank (as Mr Lozada suggested at the trial). The account balance that was stated in Quoine's database was the amount Quoine owed a user, and it was up to Quoine to take steps to ensure that it could repay that debt as and when the user called on it.

148 Further, cl 9 of the Risk Disclosure Statement seem to us to contradict the suggestion that there was an intention to create a trust. Clause 9 provided that:

> …
>
> … [Quoine] does not, however, take client fund safety measures such as depositing [the assets deposited by customers] in an account with a trust bank, etc. regarding these assets, so if [Quoine] goes bankrupt, [Quoine] will not be able to return customer assets, and customers may suffer losses.

Assets held on trust would generally not be subject to the trustee's insolvency creditors.

149 For these reasons, we are satisfied that no express trust arose over the BTC in B2C2's account. We therefore allow Quoine's appeal in this regard. That said, given our decision above that the Trading Contracts are valid and enforceable, B2C2 is nevertheless contractually entitled to the proceeds of the Disputed Trades from Quoine.

Conclusion

150 In the circumstances, we dismiss Quoine's appeal on the breach of contract claim, and allow its appeal on the breach of trust claim. Unless the parties are able to come to an agreement on costs, they are to furnish written submissions limited to six pages each, within three weeks of the date of this judgment, as to the appropriate costs orders.

151 Finally, we would like to record our deep gratitude to Prof Goh for his submissions, which were characteristically thorough, meticulously researched and extremely clear and greatly assisted us in coming to our decision.

Sundaresh Menon Chief Justice	Andrew Phang Boon Leong Judge of Appeal	Judith Prakash Judge of Appeal

Robert Shenton French
International Judge

Jonathan Mance IJ (dissenting):

Introduction

152 Do conventional legal principles work, or may they need to adapt, when traders hand their affairs to computers operating by algorithm? These questions are raised by this appeal. The computers in issue were "deterministic", meaning that they operated according to pre-determined algorithmic programs, set by humans. This is therefore a case about the legal rules applicable when machines contract in mechanistic fashion by reference to their data input, and by mistake the data input is interrupted and so the outcome becomes fundamentally distorted. The contracts here, made in the middle of the night, were for the supply of BTC by or through Quoine in exchange for the supply of ETH by B2C2 – I adopt throughout the abbreviations used by the majority ("the Majority") in their judgment ("the Majority Judgment"). In the event, the BTC were undervalued or the ETH over-valued by some 250 times, compared to any "normal" price. This occurred because Quoine's computer had, by accident, been cut off from outside world information. But it takes two to contract, and the programming of B2C2's computer to bid or offer at "deep" prices played an important role which will require further examination.

153 B2C2 maintains that, whatever went wrong, a contract so made must stand. For reasons which will appear, I consider that it is correct to approach the case on the basis that it would have been obvious to any human that a wholly untoward breakdown or error had occurred. Since the contracts were made around midnight on 19 April 2017, no human was around to make this observation, but at 6.15am next morning B2C2 did make it, by sending to Quoine the simple message: "Major Quoine database breakdown" and asking

Quoine to call B2C2 urgently. The question is whether the contracts were and are, nonetheless, binding.

The facts

154 The facts have been set out in the Majority Judgment. In brief outline:

(a) The Platform operated by Quoine in Singapore provided (i) a facility for trading virtual currencies against each other, together with (ii) a real-time price chart of completed trades for each currency pair executed on the Platform and several other major cryptocurrency exchanges. The real-time prices so displayed were "calculated, consolidated and published" to the trading dashboard through a software program used by the Platform known as the "Quoter Program": Judgment at [14] and Mr Lozada's affidavit at [9(f)].

(b) Quoine also acted as a market maker on the Platform, using the external price information obtained by its Quoter Program to generate buy and sell orders, thereby generating liquidity and depth, minimising volatility and ensuring a continuous two-sided market on the Platform: Judgment at [18] and [72].

(c) Quoine extended credit to certain margin traders on the Platform, which monitored such trades and was programmed, in the event of any margin shortfall, to close them out automatically, selling at the best available price the assets in the relevant trader's account serving as collateral: Judgment at [16]–[17].

155 The Platform and the Quoter Program were therefore designed and expected to operate integrally. However, on 13 April 2017 the login passwords

for several critical systems on the Platform were changed for security reasons, and, by oversight, the corresponding necessary changes to the Quoter Program were not implemented. As a result, the Quoter Program ceased to be able to access data from external exchanges and stopped creating new ETH/BTC orders on the Platform. This did not generate an exception message, because the notification flag for such messages had itself been disabled (see the Judgment at [71]–[72]).

156 The volume of trades shown on the Platform gradually diminished, as outstanding orders were filled, with the effect that in the middle of the night of 19 April 2017 the Platform concluded that two margin traders, Pulsar and Mr Tomita, who had borrowed ETH from Quoine in order to speculate in BTC, were in a “margin sell-out position”. The Platform therefore triggered calls to force-sell their BTC assets in exchange for ETH at the best available market price. Adding to the chapter of misfortunes, though not centrally relevant to the issues before this Court, the Platform, by design oversight, lacked a facility to check that there were sufficient assets available as security to cover any perceived margin shortfall, and so purportedly sold considerably more BTC than the margin traders had – 3000 BTC were sold in the case of Pulsar, which in fact only had some 13.5 BTC: Judgment at [73]–[74].

157 B2C2 is a trader on the Platform. Its software program operated primarily by examining to the first 20 price levels on both the bid and the offer side, and calculating by a series of steps appropriate order levels. But, against the possibility that the available price levels might be too few or too low in value, the program included “deep prices” on the bid and ask side to prevent the program “erroring out”. As at 19 April 2017 these deep prices were 10 BTC/ETH on the ask side and 0.00001 BTC/ETH on the bid side. On the bid side (B2C2 buying ETH in return for BTC) an artificial limit would in practice

prevent quotes reaching the Platform, on the ground that the bid quantity was too small. On the ask side (B2C2 buying BTC), the only limit was by reference to a threshold based on a notional exchange rate, regardless of the actual sale value.

158 Bid and ask orders at deep prices were, it appears, regularly sent out into the market on the Platform by B2C2's program, but under normal conditions they were ignored, as they would be entirely out of line with available market prices. In evidence which the Judge accepted (Judgment at [113]), Mr Boonen, the proprietor of B2C2, explained that the purpose of the deep prices was "to cover the risk to B2C2 of uncertain liquidity and market conditions" (Judgment at [112]), so catering for very remote market circumstances. Mr Boonen also stated:

> Now, this check or this feature that we're talking about, that price of 10, it's not the sort of day-to-day measure, right. It is a circuit breaker. It is when something very unusual happens. It's when the unfathomable actually crystallises. I think it's important to add that clarification.

The Judge accepted that Mr Boonen was not thereby referring to the possibility of errors of which the programme might take advantage. He was "affronted at the suggestion" that he had designed the software with this in mind (Judgment at [117]). On the contrary, the Judgment recites that:

> 118 … [H]is primary concern when writing the program was to protect the integrity of the B2C2 trading system so as to minimise the risk of any unwarranted exposure.
>
> …
>
> 121 … [H]e would have appreciated that the deep prices would only be likely to be executed when there was illiquidity in the order book for that was one of the reasons underlying the addition of the deep prices in the software in the first place. His reasoning was however directed to ensuring the B2C2 system remained operational in such circumstances rather than exploiting the existence of illiquidity.

> 122 … He might have appreciated that one contributing factor to illiquidity could be due to an oversight or error on the part of someone but there are no grounds for concluding that he considered that these would be the only circumstances that would lead to illiquidity. …

159 What in the event happened was that, in the absence of any other market liquidity, the force-close orders put out by Quoine's Platform, following Pulsar's and Mr Tomita's perceived defaults, were matched with seven of B2C2's deep price bids for BTC at or around 10 BTC/ETH. This "was at a rate approximately 250 times the rate of about 0.04 BTC for 1 ETH which had been the previous going rate" (Judgment at [4]). Next morning, when human eyes spotted what had happened overnight, Quoine purported to reverse the trades. The present case is about whether it had valid grounds to do so.

Issues

160 The trial and the appeal have raised a large number of issues, on most of which I am in full agreement with the Majority. In particular, and for the reasons given at [48]–[58] of the Majority Judgment, I agree that the force-out sales which the Platform brought about were between Pulsar and Mr Tomita (the "Counterparties" on whose behalf Quoine was acting) and B2C2. I also consider, if there was any basis for their reversal, that Quoine was acting on behalf of Pulsar and Mr Tomita and was entitled to act on their behalf in taking advantage of it. A security holder is bound to have regard to the interests of a margin trader in executing against margin, and here that clearly required the reversal of the trades, if legally possible.

161 Further, for the reasons given at [60]–[67] of the Majority Judgment, I agree that the contracts brought about by the computers did not incorporate the Aberrant Value Clause, on which Quoine relied. I prefer to reserve my position in relation to the construction and ambit of that clause had it been incorporated,

addressed at [68]–[70] of the Majority Judgment, it being unnecessary to determine this. I also agree, for the reasons provided at [71]–[77] of the Majority Judgment, that it is not possible to identify any relevant implied term, unless (I would add) it were one simply mirroring the principles, as I analyse them below, governing mistake; those principles in my view reflect precisely what honourable and reasonable traders would also regard as axiomatic in the present context, whatever the other contractual terms. Finally, I agree with the Majority's reasons at [129]–[149] for concluding that there was here no common mistake of the nature there identified, and no unjust enrichment or trust.

Unilateral mistake – *Digilandmall.com*

162 The central issue, in my opinion, addressed at [78]–[128] of the Majority Judgment, is whether the doctrine of unilateral mistake applies in these circumstances to enable the reversal of the trades. The law regarding unilateral mistake has been considered in Singapore in *Digilandmall.com*. The actual decision in *Digilandmall.com* was based on findings of actual knowledge in relation to each appellant: see *Digilandmall.com* at [88] *et seq*. The Court's discussion of the potential role of equity in the context of unilateral mistake was therefore *obiter*, though it is of great assistance in the analysis and merits close attention. The Court was clear that, outside the sphere of common law mistake, there was room for equity to operate. The contrary simple approach (that unilateral mistake only exists at common law) would not, it thought, always lead to a just result.

163 There are two particular respects in which equity may supplement the common law relating to unilateral mistake. One is to give the court jurisdiction in cases of fundamental mistake of a nature not covered by the common law.

The other is to give it jurisdiction in cases where the non-mistaken person lacks whatever is the requisite mental state for common law relief. The Court in *Digilandmall.com* alluded to both these aspects. It focused in the main on the latter aspect, and, as the Majority Judgment notes at [91], did not explore the former aspect in detail. But it came down in favour of a "flexible" doctrine of mistake in equity (further explored at [166] below), in terms which could countenance a wider and perhaps open-ended category of "fundamental" mistake. The Court in *Digilandmall.com* stated at [75] that one possible approach to equity's role would be:

> 75 … [T]o hold that the former [*ie*, common law mistake] is limited to mistake with regard to the subject matter of the contract (like that in *Bell v Lever Bros*), while the latter [*ie*, mistake in equity] can have regard to a wider and perhaps open-ended category of "fundamental" mistake: see *William Sindall Plc v Cambridgeshire County Council* [1994] 1 WLR 1016, *per* Hoffmann LJ at 1042.

It went on at [76] to note that another possibility would be:

> 76 … [T]o take a clear simplistic approach, namely, where there is actual knowledge, the contract would be void at common law. But where there is no actual knowledge, the contract ought to be performed. There would then be no room for equity to operate. But we believe that simplicity may not always lead to a just result, especially where innocent third parties are involved.

164 The Court concluded therefore that there is a role for equity. However, it did not endorse the precise distinction suggested at [75] of that case. That is because it saw common law mistake as extending beyond mistake with regard to the "subject matter" of the contract. Denning LJ had, in its view, erred in *Solle v Butcher* [1950] 1 KB 671 at 692 in suggesting (in relation to both common and unilateral mistake) that, following *Bell v Lever Bros* [1932] AC 161, "only mistake relating to identity or subject matter would come within the common law doctrine of common mistake", whereas any other "common

mistake, even on a most fundamental matter", such as a mistake "about the terms of an offer, or the identity of the person by whom it was made", would not render a contract void at law. So thought the Court in *Digilandmall.com* at [58], and I respectfully agree.

165 The limitation suggested by Denning MR would restrict common law mistake radically (although he would have counter-balanced this with a correspondingly wider role for equity). However, the English authorities, considered in the Majority Judgment at [83]–[90], indicate that, contrary to what Denning LJ thought in *Solle v Butcher*, mistake under English common law extends to all situations involving a sufficiently fundamental mistake as to the subject matter or a term, though no further. That being the scope of common law mistake under the English law, it is, as the Majority indicates at [90], unresolved to what, if any, extent there is, under English law, a further equitable jurisdiction to relieve against other situations of fundamental mistake. In contrast with English common law, the High Court of Australia has, I note, endorsed the limited role given to common law mistake by Denning LJ, but again counterbalanced this with a recognition of equitable relief in other cases: *Taylor v Johnson* at [9]–[11]. I note in this connection that the High Court spoke of the nature of mistake "in relation to a fundamental term" as capable of leading to the grant of equitable relief where one party was aware that the other was "entering [into] the contract under some serious mistake or misapprehension about either the content or subject matter of that term" (*Taylor v Johnson* at [14]). Further, it granted such equitable relief on the facts when all that could be said was that the non-mistaken party (Mr Taylor) "believed that [Mrs Johnson] was under some serious mistake or misapprehension about either the terms (the price) or the subject matter (its value) of the relevant transaction" (at [15]).

166 The Court in *Digilandmall.com* went on to consider and disagree with Canadian authority which also suggested a composite analysis, whereby mistake in equity would subsume the common law. It went on at [55] to hold that there was a role for both common law and equitable mistake, along lines indicated in *Associated Japanese Bank (International) Ltd v Crédit du Nord SA* [1989] 1 WLR 255, where Steyn J (as he then was) said this:

> No one could fairly suggest that in this difficult area of the law there is only one correct approach or solution. But a narrow doctrine of common law mistake (as enunciated *in Bell v Lever Brothers* [1932] AC 161), supplemented by the more flexible doctrine of mistake in equity (as developed in *Solle v Butcher* [1950] 1 KB 671 and later cases) seems to me to be an entirely sensible and satisfactory state of the law …

Subject to the qualification, which the Court in *Digilandmall.com* had already made at [58], that common law mistake should not be understood as narrowly as Denning LJ had suggested in *Solle v Butcher*, Singapore law therefore recognises both the common law and equity as having relevant roles in cases of unilateral mistake. The recognition of a clear role of equity comes with the advantage that Steyn J pointed out, which the Court in *Digilandmall.com* echoed at [77], namely that "[a] great attribute … of equity[] is its flexibility to achieve the ends of justice".

167 The Court specifically identified in this connection the ability of equity to address situations of constructive notice. By this, it made clear that it was referring to situations falling short of actual knowledge: see *eg*, *Digilandmall.com* at [76], [77], [83] and [88]. Of such situations, the Court said:

> 77 … Constructive notice is a concept of equity and whether constructive notice should lead the court to intervene must necessarily depend on the presence of other factors which could invoke the conscience of the court, such as "sharp practice" or "unconscionable conduct. Negligence *per se*, on the other hand, should not be sufficient to invoke equity. Parties to a contract do not owe a duty of care to each other.

One important consideration that may, of course, arise is that the exercise of any equitable jurisdiction can and will always take care to protect legitimate third party interests. Here, however, it was not suggested that any such interests which arose in the very short period before the mistake came to light precluded the avoidance by Quoine of the transactions. (Paragraph 256 of the Judge's first instance judgment mentions – but only as a reason for not ordering specific performance against Quoine – that, "[b]efore the trades were reversed", B2C2's software generated sales of slightly under one-third of the BTC "on nine different exchanges". Since any such sales were not relied on as a bar to avoidance, no consideration was, it seems, given to their terms or prices, though these may of course become material to damages.)

168 The Court in *Digilandmall.com* developed its reference to unconscionability in the following *dicta*:

> 78 However, "unconscionability" cannot be imputed based on what a reasonable person would have known. It must be based on matters the non-mistaken party knows: see *Can-Dive Services v Pacific Coast Energy Corp* (2000) 74 BCLR (3d) 30 ("*Can-Dive*") per Southin JA at [142]. One cannot act unconscionably if one does not know of facts which could render an act so. Thus, we do not think we can accept the views of Shaw J, the lower court judge in *Can-Dive*, that constructive knowledge alone would suffice to invoke equity's conscience. However, as we have indicated earlier, Canadian jurisprudence has moved in that direction.

169 The judgment in *Digilandmall.com*, therefore, indicates that unilateral mistake in equity can exist where there is a combination of factors: (i) constructive notice of a mistake which would, if actual knowledge existed, render the contract void; (ii)(a) behaviour by the non-mistaken party which is unconscionable (b) based on knowledge by the non-mistaken party of the facts involved in the unconscionability. It is also consistent with the further proposition, which I would endorse, that the flexible equitable doctrine is

capable of covering situations of unilateral mistake, where the mistake, although not strictly as to subject matter or a term, is sufficiently "fundamental" to justify equitable intervention – subject again, if the analysis in *Digilandmall.com* is followed through, to the presence of factors (ii)(a) and (b).

170 The analysis in *Digilandmall.com* does, however, give rise to two points, which I mention although their resolution is not in my opinion necessary for the determination of this appeal. First, if unconscionable behaviour based on knowledge by the non-mistaken party is understood as behaviour conducing to the mistaken party remaining mistaken, then it is difficult to see how there could ever be constructive notice. As the Court in *Digilandmall.com* recognised at [76], [77], [83] and [88], constructive notice comes into consideration where there is no actual knowledge of the mistake. Second, the primary basis for equitable relief on the ground of unilateral mistake is the mistake of which the non-mistaken party has constructive notice. Where unconscionability operates, it is as an additional element (see *Digilandmall.com* at [77], [80] and [83]) – in effect a control mechanism. Authorities such as, most recently, *BOM* deal with the situation, materially different therefore from the present, where unconscionability is all that is relied on to justify the setting aside in equity of an otherwise valid transaction. The limited view of unconscionability taken in *BOM* (linking it closely with what was called "class 1 undue influence") must be seen in that context. Where the primary basis for relief is a mistake of which the non-mistaken party has constructive notice, no reason appears why unconscionability should not operate on a flexible basis to meet the equity of the particular case.

171 Consistently with the first point, unconscionable behaviour conducing to the mistaken party remaining mistaken is a typical – though not essential – hallmark of unilateral mistake at common law based on *actual* knowledge of a

mistake as to a term which the non-mistaken party "snaps up". Thus, in common law cases such as *Tamplin v James* (1880) 15 Ch D 215, quoted in *Hartog v Colin & Shields* [1939] 3 All ER 566, courts spoke in terms of a party "snapping up the offer", which, as also in *Digilandmall.com*, the non-mistaken party actually realised to be mistaken. (The position is different in Australia, where, for reasons explained at [164] above, the role of equity is much greater and embraces situations of "snapping up" with actual knowledge, like that in *Taylor v Johnson* itself, which would under English and Singapore law fall within common law mistake.) But "snapping up" or unconscionable behaviour conducing to the mistake is not an essential feature of unilateral mistake at common law, because this can occur where there is simply knowing and silent "standing by".

172 There can be marginal situations where a non-mistaken party suspects a mistake by the other party and "proceeds on a course of wilful ignorance designed to inhibit his own actual knowledge of the other's mistake" (in the words of McLachlin CJBC, as she then was, in *First City Capital Ltd v British Colombia Building Corp* (1989) 43 BLR 29 ("*First City Capital*") at [30]). But, just as shutting a blind eye may be equated with actual knowledge or recklessness with intention, such situations are best equated with actual knowledge, rather than treated as cases of constructive notice. That is in my opinion correctly stated by the Court in *Digilandmall.com* at [42], where it referred to 'what is called "Nelsonian knowledge"', namely wilful blindness or shutting one's eyes to the obvious", and went on to state:

> … Clearly, if the court finds that the non-mistaken party is guilty of wilful knowledge, it will be in line with logic and reason to find that that party had actual knowledge.

However such situations may be analysed, it is clear that the Court in *Digilandmall.com* understood the concept of constructive notice to extend to a different, broader range of situations.

173 It follows that if constructive notice is to have the relevant role in relation to unilateral mistake in Singapore law, which the Court in *Digilandmall.com* in my view correctly assigned to it, unconscionability cannot relate to behaviour with knowledge of the mistake conducing to the mistaken party remaining mistaken. Equity's conscience must be capable of being affected by behaviour in seeking to retain the benefit of the mistake, once it is discovered. Taking words which were used by the Court in *Digilandmall.com* itself at [80], the court is then:

> … [E]ntitled to intervene and grant relief when it is unconscionable for the non-mistaken party to insist that the contract be performed. …

174 Two passages from prior Canadian authority cited by the Court in *Digilandmall.com* at [49] and [51] need to be read with caution and in context, in so far as they may at first reading appear to link unconscionability and "snapping up" to equitable relief in circumstances of constructive notice. The two passages come from the first instance decision in *First City Capital Ltd* at [34] and the British Colombia Court of Appeal decision in *256593 BC Ltd v 456795 BC Ltd* (1999) 171 DLR (4th) 470 ("*256593 BC Ltd*") at [25]. In the first passage, McLachlin CJBC said that, on a hypothesis of no actual knowledge:

> … [T]his is most certainly a case where [the defendant] ought to have known that [the owner] had no right to sell the building to it. Nevertheless, [the defendant], in its negotiations with [the owner], pursued a course designed to inhibit discovery of the mistake, moving with uncharacteristic haste to snap at [the owner's] mistaken offer.

On its facts, *First City Capital* falls fairly clearly into the category of Nelsonian knowledge: see in particular at [18]–[20] of *First City Capital*, where McLachlin CJBC concluded that BCBC "at very least suspected" a mistake and checked with a superior the authority of the junior with whom it was dealing "without, significantly, asking … about the substance of the transaction, a course which might have disclosed the error".

175 The second passage is attributed in *Digilandmall.com* to Donald JA, giving the judgment of the Court of Appeal in *256593 BC Ltd*. But it was actually a quotation by Donald JA, from (once again) the judgment of McLachlin CJBC in *First City Capital*, about which Donald JA went on to make this reservation:

> [26] Counsel for Ace submits there is no evidence of snapping up the offer in the present case. Assuming that to be so, I do not think that conduct so characterized is necessary for rescission on mistake. I respectfully agree with the reasoning of Shaw J. in *Can-Dive …* where he said at 69-70 that:
>
> > While I agree with what Madam Justice McLachlin said so far as it goes, I do not believe she intended to imply that there must be a conscious taking advantage by one party of the other in all cases. The element of constructive knowledge based upon what a reasonable person "ought to know" is premised upon that person not being conscious of the error. Thus, <u>while the idea of "snapping up" may well apply in cases where one side is aware of the other side's error, I do not think it can be applied literally in the constructive knowledge cases</u>. Rather, in my opinion, constructive knowledge alone will suffice to invoke equity's conscience. [Emphasis added].
>
> [27] Baker J. in *Craig Estate v. Higgins* (1993), 86 B.C.L.R. (2d) 64, put in summary form at 72 a statement of the law with which I respectfully agree:
>
> > The court may grant relief from a contract entered into on the basis of unilateral mistake where the plaintiff has established, and has met the high burden imposed upon it of doing so, that a mistake has been made and that it would be unjust or inequitable for the court to allow the other party to uphold the bargain. One of the grounds

> > on which a court may find that it would be unfair or inequitable is if the party seeking to enforce it had actual knowledge or constructive knowledge that a mistake had been made prior to acceptance of the offer.
>
> [28] All the elements for rescission on unilateral mistake are present here: (1) a mistake; (2) on a material term; (3) known actually or constructively by the non-mistaken party; and (4) an unconscionable result if the settlement agreement is enforced. It is my opinion that the mistake gives Ace a huge windfall that it had never bargained for and leaves Earl's with an outstanding debt while simultaneously transferring Earl's' interest in the very asset underlying that debt.

176 Other passages in McLachlin CJBC's judgment in *First City Capital* in my opinion actually support the analysis adopted in British Colombia by the Court of Appeal as well as by Shaw J and Baker J. Thus, referring to *McMaster University v Wilchar Construction Ltd* [1971] 3 OR 801, 22 DLR (3d) 9 (HC) at p 18, McLachlin CJBC said:

> [26] In *McMaster*, the Court held that the offeror was to be relieved from a contract involving a mistake known to the offeree because "it would be unconscionable, unfair and unjust *to permit the plaintiff to maintain the contract*" (p. 22). This test was applied by Gould, J. of this Court in *Beverly Motel (1972) Ltd. v. Klyne Properties Ltd.* (1981), 30 B.C.L.R. 282 … :
>
> > Provided there is mistake as to the promise or as to some material term of the contract, if the court finds that there has been honest, even though inadvertent, mistake, it will afford relief *in any case where it considers that it would be unfair, unjust or unconscionable not to correct it …*
>
> [27] … Fraud in this wider sense refers to transactions falling short of deceit *but where the Court is of the opinion that it is unconscientious for a person to avail himself of the advantage obtained …*"
>
> [emphasis added]

177 At [78] of *Digilandmall.com*, quoted at [167] above, the Court cited Southin JA who said at [142] of *Can-Dive Services v Pacific Coast Energy Corp* (2000) 74 BCLR (3d) 30 that "questions of unconscionability are not matters to

be determined on what someone ought to have known, but what he did know". The context was a claim to rectify a sub-contract to give a right to claim extra remuneration for working in difficult soil conditions, in circumstances where it was thought (as it turned out mistakenly) that such a right anyway followed from the back-to-back terms of the head contract. The claim failed on the basis that '[t]he critical "fact" - the true meaning of the head contract - was unknown to both parties to the sub-contract until the learned trial judge handed down his judgment": *Can-Dive* at [143]. Both parties had "agreed to be bound by the head contract, whatever it meant", and the claim amounted to an attempt to rectify the bargain, rather than the sub-contract (*Can-Dive* at [141] and [144]). But what is of current interest is that Southin JA, with whose judgment Ryan JA agreed, gave at [141], as an example of a situation where equitable relief against mistake could be given, a scenario where a mistake occurred in the course of "mechanical" transcription and was only subsequently discovered. She said:

> In the case at bar, if, when the subcontract had been typed up, the typist had omitted to put in the weather clause upon which the parties had struck a bargain, it would, in my opinion, be equitable fraud for the head contractor to say, in effect: "Well, too bad, see the words of the contract." But that is not what happened here. …

178 The Court at [78] of *Digilandmall.com* also expressed some disagreement with the views of Shaw J at first instance in *Can-Dive*, while going on to recognise that Canadian jurisprudence "has moved in that direction" - quite possibly a reference to the British Colombia Court of Appeal's reasoning in *256593 BC Ltd*. But the problem is not just one of preference, it goes to the heart of any significant doctrine of constructive notice as a basis for equitable relief. It is not however critical, as I see it, to resolve the problem in this case, which is concerned with a different issue: how, if at all, a doctrine based on a need for either actual or constructive notice can operate in circumstances where neither party was or could have been aware of the mistake as and when it

occurred. As will appear, I consider that this conundrum can be resolved in this case by considering what B2C2's actual state of mind would have been, given knowledge of the circumstances of the transactions as and when they occurred. To that extent, the case parallels situations of actual knowledge, rather than constructive notice.

Conceptual basis of unilateral mistake

179 Before considering further how the law of unilateral mistake may apply in the present case, I should say something about its conceptual basis. The Court at [31] of *Digilandmall.com*, in a phrase quoted in the Majority Judgment at [81], suggested that it is "self-evident" that "a party who is aware of the error made by the other party cannot claim that there is *consensus ad idem*". There is a long-standing academic debate about the foundational principle underpinning the law of contract at common law. Is contract based on objective evaluation of the parties' communications against the background of all the circumstances which were or are to be taken to have been within their knowledge? Or is it based on subjective consensus, modified in almost every case by the consideration that each party will be effectively precluded from relying on any interpretation different from that which they objectively agreed between them (an approach similar to that which I understand the French Civil Code to adopt: see *eg, Dallah Real Estate and Tourism Holding Company v The Ministry of Religious Affairs, Government of Pakistan* [2011] 1 AC 763, at [19])? If the former, then unilateral mistake operates as a limited exception to the objective approach, which is how it is explained in *Chitty* at para 3-022; see also *Treitel on The Law of Contract* (Sweet & Maxwell, 14th ed, 2015) at paras 1-002, 2-002 and 8-047; and John Cartwright, *Misrepresentation, Mistake and Non-Disclosure* (Sweet & Maxwell, 3rd ed, 2012) at para 13-02. If the latter, then

unilateral mistake is one, limited situation where estoppel cannot and does not operate, because there is no reliance.

180 In *Taylor v Johnson*, the High Court of Australia concluded at [9] that "[w]hile the sounds of conflict have not been completely stilled, the clear trend in decided cases and academic writings has been to leave the objective theory in command of the field". I agree with this, and it corresponds with the terms in which other common law courts have described the principles governing contract: see *eg*, *Reardon Smith Line Ltd v Yngvar Hansen-Tangen* [1976] 1 WLR 989 at 997; *Investors Compensation Scheme Ltd v West Bromwich Building Society* [1998] 1 WLR 896 at 912; *Charter Reinsurance Co Ltd v Fagan* [1997] AC 313 at 384; and *Wood v Capita Insurance Services Ltd* [2017] AC 1173 at [10] ("The court's task is to ascertain the objective meaning of the language which the parties have chosen to express their agreement"). On that basis, unilateral mistake is an exception, recognised by the law to further the ends of justice, of a similar character to the principles underlying the law of misrepresentation, undue influence or mistake. The Court in *Digilandmall.com* effectively recognised this at [31] when it said:

> … The law should not go to the aid of a party who knows that the objective appearance does not correspond with reality. It would go against the grain of justice if the law were to deem the mistaken party bound by such a contract.

This analysis also has the further consequential advantage of explaining why and how the law can establish, as the Court recognised that it should in *Digilandmall.com*, different rules for common law mistake in circumstances where a fundamental mistake as to a term is involved (the contract is void), and for equitable mistake (the contract is potentially voidable). The logic of the theory of subjective consensus is that there is no contract at all in any case of

unilateral mistake, whether common law or equitable. The High Court of Australia pointed this out in *Taylor v Johnson* at [8].

181 The value of a differentiated analysis of unilateral mistake, operating both at common law and in equity, is that it enables the court to address in a circumstance-specific way situations where, for one reason or another, parties objectively reach agreement on a contract which, as one party knows or ought to know, differs in some fundamental respect from what the other party thinks it is or means. The mistake may, I add, come to the former party's knowledge quite independently of and outside the contractual discussions. Take for example, a contract made for oats or even for new oats, where the seller, unknown to the buyer, is told by a third party with no authority to act for the buyer (or discovers by reading without permission a piece of paper on the buyer's desk while the buyer is out of the room), that the buyer believes it to be a term of the contract that the oats will be old. The offer and acceptance and the contract made all objectively permit or call for the delivery of new oats, but the seller's knowledge of the buyer's actual misapprehension prevents the seller from insisting on performance. The underlying rationale is not a lack of correspondence between offer and acceptance, but a principle of justice.

The application or adaption of the above principles

182 I turn to the application, or adaption, of the above principles in the present circumstances. For the reasons given by the Majority at [114], I agree that the present case cannot readily be analysed as involving an actual mistake as to a term of the transactions as executed. That is because of the very fact that the transactions were effected by computers operating mechanistically according to algorithms, leading inexorably, although blindly, to such transactions. The case does not therefore fit within the principles governing

unilateral mistake at common law, and it would not be right to extend these to cover such a situation, since the operation of the algorithms might also have led (though it did not do so here) to relevant third party interests arising before any human discovery of the mistake. What can however be stated with confidence is that the mistake and its outcome in the form of the transactions was in human terms just as fundamental as the sort of mistake at issue in *Digilandmall.com*. The reaction of any human trader viewing the transactions as executed would have been that they were fundamentally misconceived – the result of some fundamental mistake leading to terms for the sale of BTC to which no seller of BTC would, in prevailing market conditions, agree.

183 In these circumstances, the enquiry therefore moves to the more flexible area of unilateral mistake in equity. For that purpose, the Judge's findings, in particular at [227] were and are, to my mind, clear. There was a fundamental mistake, in that Quoine's system operated (and led to the sale of BTC on terms) in a way that was not conceived as possible and would never have been accepted by Quoine or the counterparties in the prevailing circumstances. Further, although B2C2 had no knowledge of the mistake as and when it occurred, the position is that, as soon as it inspected the computer print-outs next morning, it knew at once that there had been such a mistake, and emailed its message to Quoine: "Major Quoine database breakdown", to which I referred at the outset of this judgment and to which I shall return at [203]. The question is whether, where two parties well know that there has been a fundamental mistake as soon as a computerised transaction comes to their attention, where no detriment has occurred and no relevant third party interests intervened, and where the mistake could readily be rectified, the law will enforce the contract regardless. For the reasons I will give, in my opinion, the law should and can in such circumstances hold that the contract is voidable, as Quoine claims.

184 Certainty in contract is of course important, but it is not everything: see *eg*, *Golden Strait Corporation v Nippon Yusen Kubishiki Kaisha* (*The "Golden Victory"*) [2007] 2 AC 353; *Bunge SA v Nidera BV* [2015] 3 All ER 1082. Like all great judges, Lord Mansfield could see the force of both considerations. In *Vallejo v Wheeler* (1774) 1 Cowp 143 at 153 he said that:

> In all mercantile transactions the great object should be certainty: and therefore, it is of more consequence that a rule should be certain, than whether the rule is established one way or the other. Because speculators in trade then know which ground to go upon.

But in another famous decision, *Alderson v Temple* (1768) 4 Burr 2235 at 2239, he showed a different concern:

> … [T]he most desirable object in all judicial determinations, especially in mercantile ones, (which ought to be determined upon natural justice, and not upon the niceties of the law,) is, to do substantial justice. …

There are cases where justice outweighs in the balance the interests of legal certainty. The Court in *Digilandmall.com* recognised this in the present context, endorsing at [81] a statement of Assoc Prof Yeo Tiong Min that '[t]he fear that the use of "elastic" equitable principles will lead to uncertainty and encourage litigation is arguably exaggerated' and adding it 'is not more difficult to determine what is "equitable" than what is "reasonable" at common law'.

185 The critical problem which Quoine faces in this case is that, in conventional cases of unilateral mistake, the relevant knowledge or constructive knowledge either exists or not, as a matter of fact, as and when the contract is made. The focus of the enquiry is then on the actual state of mind and conduct of human beings involved in the making of the contract. That approach is by definition impossible in the different context of a contract made between

computers programmed by humans. But the right approach is less obvious. The Judge dealt with the issue as follows:

> 200 Quoine submits that the Court should consider what the parties are likely to have known and intended if, hypothetically, they had met on the "floor of the exchange" for the purpose of reaching an agreement on the trades on 19 April 2017. On this basis, as I understand it, it is contended that mistakes can be identified by comparing theoretically what would have happened in face-to-face negotiations with what actually happened at the computer interface.
>
> …
>
> 202 B2C2 contends that there must be a mistake as to a term of the contract and that the party placing the order, albeit by a computer, must be the person mistaken. It was not sufficient if there was a mistake as to facts surrounding that term. In this respect therefore B2C2's position was that the assessment of a relevant mistake was no different in the case of computer transactions than in face-to-face transactions.
>
> 203 Further, relying on *Chwee* [*ie*, *Digilandmall.com*], B2C2 contends that the only relevant knowledge is knowledge at the time of contracting and suggests that it is wrong to assess knowledge or constructive knowledge at the time the deep price mechanism was programmed.
>
> 204 So far as concerns the nature of the mistake, I cannot accept Quoine's hypothetical meeting contention. The question is not what would have happened if the computer element was absent. The parties have chosen to use computers as the means of entering the Trading contracts. They have entered Platform contracts with Quoine so as to be able to enter Trading contracts and, in the case of margin traders, they have entered the Margin trading contracts to regulate their position vis-à-vis the lender, in this case Quoine. All parties were therefore aware that there was to be no human element in the trades and it is wholly artificial to work on the basis of what might have happened if a human element was involved. Equally whilst B2C2's position identifies what the nature of the mistake must be, it does not assist in determining how and when to identify it.
>
> 205 In the circumstances of this case, I have concluded that the relevant mistake must be a mistake by the person on whose behalf the computer placed the order in question as to the terms on which the computer was programmed to form a Trading contract in relation to that order. This mistake will have to be in existence at the date of the contract in question but may have

> been formed at an earlier date. The existence of a relevant mistake will be a question of fact in each case.
>
> 206 Turning to knowledge of the mistake, the law in relation to the way in which ascertainment of knowledge in cases where computers have replaced human actions is to be determined will, no doubt, develop as legal disputes arise as a result of such actions. This will particularly be the case where the computer in question is creating artificial intelligence and could therefore be said to have a mind of its own.
>
> …
>
> 210 Where it is relevant to determine what the intention or knowledge was underlying the mode of operation of a particular machine, it is logical to have regard to the knowledge or intention of the operator or controller of the machine. In the case of the kitchen blender, this will be the person who put the ingredients in and caused it to work. His or her knowledge or intention will be contemporaneous with the operation of the machine. But in the case of robots or trading software in computers this will not be the case. The knowledge or intention cannot be that of the person who turns it on, it must be that of the person who was responsible for causing it to work in the way it did, in other words, the programmer. Necessarily this will have been done at a date earlier than the date on which the computer or robot carried out the acts in question. To this extent I reject B2C2's contention that that the only relevant knowledge is knowledge at the time of contracting. I agree with Quoine that regard should be had to the knowledge and intention of the programmer of the program in issue when that program (or the relevant part of it) was written.
>
> 211 Accordingly, in my judgment, in circumstances where it is necessary to assess the state of mind of a person in a case where acts of deterministic computer programs are in issue, regard should be had to the state of mind of the programmer of the software of that program at the time the relevant part of the program was written. In the present case that person is Mr Boonen.

186 The Judge then gave effect to this approach, by examining first the state of mind of Pulsar and Mr Tomita operating as margin traders on the market and then that of Mr Boonen when he programmed the B2C2 computer and set it into operation to trade on the market. As to the former, the Judge focused on the state of mind of the margin traders, and, on the basis of the evidence given by

Mr Tseung of Pulsar, accepted that both Pulsar and Mr Tomata held a mistaken belief which was fundamental to the trades. The Judge explained this conclusion as follows:

> 227 Mr Tseung, however, gives evidence that because the trades were carried out at the highly abnormal price, they were clearly invalid and that Pulsar did not consider them to be valid. He went on to state "[i]t was never contemplated by Pulsar that any trades may be transacted on the Platform at prices which deviated so substantially from the actual market prices". Although he gave no reasons for holding this belief, he was not cross-examined on this statement and I therefore accept that this was a genuinely held belief. Indeed, having heard all the evidence, I can well understand that a trader on the Platform who was not a market maker might well have formed such a belief even having read the Agreement and the Risk Disclosure Statement. It is a belief which is founded on the premise that the Platform would either always operate as intended or, alternatively, if for some reason it did not, there would be adequate error identification and protection systems in place to prevent trading continuing in such circumstances.
>
> 228 I therefore accept that the Counterparties held this mistaken belief and that it is a belief which is fundamental to the Trading contracts.

187 The evidence was, in substance, that Pulsar never contemplated that trading could occur at such deviant prices other than as a result of some egregious error. The Judge said he could well understand that a trader on the Platform who was not a market maker might well have formed such a belief. The reservation "who was not a market maker" deserves a word. 98% of the relevant market making on the Platform was done by Quoine, as the Majority Judgment recites at [10], and there is every reason to think that it would and did view the relevant trades in exactly the same way as Mr Tseung of Pulsar, and sought to set them aside on that basis. The Judge's reservation presumably arises because B2C2 did some market making, and at the same time also issued its "deep" bids and offers which it contemplated might be accepted for some reason other than a mistake (though the suggested unfathomable market event had

never in fact arisen). The reservation therefore takes one back to the core of the issue – whether B2C2's accepted intention to cater for wholly unfathomable events (which in fact never occurred) is the answer to the claim of unilateral mistake.

188 A collateral observation which it is convenient to interpose at this point is that it is, to my mind, odd that attention at trial should have been so focused on the margin traders, and not on Quoine. It was Quoine whose computer was programmed to instruct the trades. Moreover, most of the BTC sold did not exist as assets of Pulsar, and there must at least be a question whether Quoine could have had ostensible authority to bind Pulsar by a sale of non-existent assets which Quoine can have had no actual authority to sell on Pulsar's behalf. These points were not explored before us, and I need say no more about them, save to repeat that, if attention had been focused on Quoine's state of mind, rather than that of the margin traders, I feel confident that the Judge would have made the same finding with regard to Quoine that he made with regard to the margin traders.

189 Having found a fundamental mistake on the side of the suppliers of BTC, the Judge turned to consider the other side of the issue, whether the mistake was sufficiently known to B2C2 as the supplier in exchange of ETH. As to this, he said:

> 229 It is next necessary to determine whether Mr Boonen had actual knowledge of the mistaken belief at the time he inserted the deep prices and I thus return to the findings of fact in [118]–[125] above. Can it be said that Mr Boonen knew that "it was never contemplated by [any trader] that any trades would be transacted on the Platform at prices which deviated so substantially from the actual market prices"? This amounts to a belief held by Mr Boonen at that date that the price was so abnormal that no trader would trade at that price otherwise by way of a mistake.

> 230 This is the aspect of this case that I have found to be most troubling but I have concluded on the basis of those findings of fact that Mr Boonen did not insert the deep prices with that belief. He foresaw that a number of factors might arise which would cause the deep prices to be inserted and the overriding reasons for them being inserted was to protect B2C2 in the event of the unexpected happening. He did not exclude the possibility of trades at those prices being executed. Whilst he was aware that one possible cause was that it could be the result, wholly or in part, of some error or omission on the part of someone, including himself, he did not turn his mind in any detail to the circumstances that might lead to such trades being executed. He knew that the Platform was an automated system and that therefore no opportunity would arise for any particular trade to be reviewed by the parties in advance. In the circumstances of this case, in order for him to have actual knowledge that other traders believed that in no circumstances would a trade be transacted on the Platform at prices which deviated so substantially from the actual market prices, I consider that it would be necessary for it to be demonstrated that he held that belief himself, which he did not: see [123] above.
>
> 231 Accordingly, whilst I accept that the Counterparties held the second mistaken belief relied upon by Quoine, I do not accept that Mr Boonen had actual knowledge of that belief. The defence of unilateral mistake at common law therefore fails."

190 The paragraph numbered [123], to which the Judge referred at the end of [230] read as follows:

> 123 I therefore accept that when Mr Boonen configured the code he knew of the possibility that the order book might become empty and that in that event the deep prices would be placed on the order book but I do not accept that he ever considered that there was a real possibility of the deep price orders being executed. He considered that this was unlikely and I do not believe that he turned his mind in any detail to the circumstances in which this might happen. That was not the motivation for designing the software as he did. He did not consider that the deep prices were irrational. Indeed he gave cogent reasons for the selection of the prices which were directed to protecting the integrity of his system but at a level which he felt would not be so high as to cause a circuit break on the Platform: see [86] above. This last factor is inconsistent with any assertion that Mr Boonen understood that trades would only be matched by the Platform at prices at or near the previously existing prevailing market price: see [230] below.

The Judge went on at [124]:

> 124 The evidence does not support the conclusion that when designing the code Mr Boonen perceived that no trader would ever agree to buy ETH at such a price unless he had made a mistake and included the deep prices with this in mind. …

191 In relation to Mr Boonen the Judge therefore thought that the relevant enquiry was whether he knew or believed when he programmed B2C2's computer, prior to and in June 2016, that *no trade would ever take place at the deep prices* which he had programmed his computer to output to the Platform at apparently random times *other than as a result of some fundamental error*. Since the Judge had held that Mr Boonen had a rational motive for inserting the deep prices (which Mr Boonen had explained as being to cover very unusual or unfathomable market conditions: see the Judgment at [113], quoted at [158] above), he could not be said to know or believe when programming his computer or at any time in advance of the actual transactions that, if a transaction took place at the deep prices, it *must involve a mistake and nothing else*.

192 On such an approach, before any relief could be granted, it would have to be shown (a) that Mr Boonen knew by prophetic foresight that the particular transactions would occur at the deep prices over the night of 13 April 2017 due to some fundamental error (which is obviously impossible) or (b) that each and every transaction which might ever occur at the deep prices he offered would be the result of some mistake, *ie*, that any transaction at his deep prices could *only* arise from some fundamental mistake. The latter approach, which the Judge adopted, therefore looks at the position in the abstract and in advance, without any regard for the actual transactions or the market circumstances surrounding them. This is a different approach to that which applies when considering mistake in the context of a transaction completed by human intervention, when

the first question is the actual state of mind of each party in the light of the surrounding circumstances. If one of them by mistake refers to a price per "pound", rather than per "piece", the other, if aware of the state of the market, will know in that light when a wholly mistaken word has been used. The Judge's approach involves omitting a usually important element in any appraisal of such a situation, namely (here) whether there was anything drastically unusual about the surrounding circumstances or the state of the market to explain on a rational basis why such abnormal prices could occur, or whether the only possible conclusion was that some fundamental error had taken place, giving rise to transactions which the other party could never rationally have contemplated or intended.

193 The key question is, therefore, whether the law of unilateral mistake falls to be applied in a manner which leaves out of consideration circumstances which are normally central to its application, simply because the parties entrusted their dealings to computers which can have no such consciousness. In my opinion, it does not and should not. The law must be adapted to the new world of algorithmic programmes and artificial intelligence, in a way which gives rise to the results that reason and justice would lead one to expect. The introduction of computers no doubt carries risks, but I do not consider that these include the risk of being bound by an algorithmic contract, which anyone learning of would at once see could only be the result of some fundamental error in the normal operation of the computers involved. Computers are outworkers, not overlords to whose operations parties can be taken to have submitted unconditionally in circumstances as out of ordinary as the present. I do not think that the obvious malfunctioning of a computer-based system should be given the dominance that B2C2's case implies.

194 In my opinion, it is necessary to revisit the Judge's refusal to take as the relevant test what Mr Boonen or anyone in his position could or would have known or believed, if he or they had known of the circumstances which have actually occurred. That is a test which relates what actually occurred to natural human reactions, given knowledge of what occurred. It matters not whether one assumes such knowledge at the time of the transactions, or prophetically in advance. The answer is the same. If it would at once have been perceived that some fundamental error had occurred, relief should be available. There is no difficulty here about identifying the circumstances to which, given such knowledge, the objective test would and should be applied.

195 For the reasons indicated at [182] and [183] above, any relief should be equitable, rather than at common law. The fact that computers were involved makes this appropriate. B2C2's computer might have on-sold the BTC by algorithm at a normal price to a *bona fide* purchaser for value. Equity could then refuse to set aside the transaction whereby B2C2 acquired the BTC. The fact that Quoine was at fault should not however point decisively away from relief. There was here certainly a series of avoidable errors, which some might suggest should preclude relief. But the question is whether the errors were so egregious as to justify imposing (on whichever of Pulsar and Mr Tomita or Quoine might end up holding the parcel) a loss of perhaps millions of dollars, and benefitting B2C2 to the tune of perhaps millions of dollars by way of what some would call an uncovenanted windfall. In circumstances where B2C2 would and did know at once that some fundamental error had occurred, which error could be rectified without any detriment being suggested to B2C2 or any third party, I have no doubt about the answer. Unilateral mistake commonly involves fault, even if the fault only consists in failure by the mistaken party to appreciate what impression they have, objectively, given to the other party. Where the error is known, the

fact that it is or may be attributable to fault cannot axiomatically outweigh the considerations of fair dealing that lead to relief both at common law or, *a fortiori* as here, in equity. The High Court of Australia cited in this connection, with apparent approval, at [13] of *Taylor v Johnson*, the position in the United States that "it matters not that the mistake is, or may be, due to negligence or want of care on the part of the party who is mistaken when the other party has not materially changed his position and third party rights are not in question (*De Paola v. City of New York* (1977) 394 NYS (2d) 525, at pp 527–528)". But it is unnecessary to go that far. There is on any view a balance. In the present case, where any reasonable trader would at once have identified, as B2C2 did identify, a fundamental computer system breakdown as the cause of the transactions, the considerations weighing in favour of reversal of the transactions outweigh in the balance any errors or faults which led to that breakdown.

196 It should also be remembered that fundamental errors of the present nature can and do occur in computerised exchanges without any fault. Suppose in the present case that a mouse had eaten, or a third party using a mechanical digger had cut, a cable linking the Platform to the Quoter Program. Or suppose someone had hacked into Quoine's computer and disconnected the link. The same question, whether relief could be granted, would arise, without there being necessarily any background of fault. The law must be capable of addressing such a situation in a manner which corresponds with what I would regard as the clear justice of the case, as well as with the natural expectations of reasonable traders.

197 It was suggested that all such problems, including the present, could have been dealt with by appropriately framed conditions of business. No doubt that is so. But the same could said in many of the situations in which the

common law has developed principles of relief, to achieve just results. The law governing mistake is itself a classic example, as is the law of misrepresentation, duress, undue influence, *etc*. The question is not whether the parties might have regulated such situations generally, or the present situation in particular, by specific agreement, but whether in the circumstances they should be taken to have accepted the risk of their occurrence so as to preclude application of such common law principles, adapted as necessary to the age of algorithms.

198 There is nothing surprising about the law applying a test which asks what an honest and reasonable trader would have understood, given knowledge of the particular circumstances. The law of contract itself is, as I have indicated at [179]–[181], based generally not on what the parties actually thought or knew was the effect of particular words or conduct, but upon what they must reasonably be taken to have understood or known in all the relevant circumstances.

199 A similar objective approach is also found in tort and criminal law. Take the tort of knowing or dishonest assistance. This is committed where a breach of fiduciary duty has been committed by A, and B is said to have assisted it dishonestly. But dishonesty is judged objectively in the light of the circumstances known to the alleged assister. In other words, there are two stages: the first is to ascertain what the alleged assister knew; but, once that is ascertained, the honesty or dishonesty of their conduct falls to be judged by an objective standard of honesty to be expected and applied in the light of such knowledge: see *Barlow Clowes International Ltd & Ors v Eurotrust International Ltd & Ors* [2006] 1 WLR 1476; see also two recent judgments of the Court of Appeal of England and Wales applying this test: *Group Seven Ltd v Notable Services LLP* [2019] EWCA Civ 614 and *Simetra Global Assets Ltd v Ikon Finance Ltd* [2019] EWCA Civ 1413. This objective approach also

applies in the criminal law: see *Ivey v Genting Casinos* (UK) Ltd [2018] AC 391, indicating that the decision in *R v Ghosh* [1982] QB 1043 should no longer be followed in so far as it stated that a defendant must be conscious subjectively that his conduct was dishonest.

200 There is nothing surprising, impermissible or unworkable therefore about a test which asks what any reasonable trader would have thought, given knowledge of the particular circumstances. That is the proper approach, in my opinion, in the present situation. Whether the unknown activities of two computers in the middle of the night should bind the parties should be judged by asking whether any reasonable trader, on the relevant exchange, knowing what was happening (or what had happened) could or would have thought, in the otherwise prevailing circumstances, that this was anything other than the consequence of a gross and unintended "major database breakdown" or error with equivalent effect. Since this is how B2C2 actually categorised it, the answer is doubly obvious. Of course, this test involves a hypothetical, as the Judge said at [204]. But it does not work on the basis of speculation as to what "might" have happened if a human element had been involved. On the contrary, it provides relief in equity in the present case because any reasonable person, knowing of the relevant market circumstances, *would* have known that there was a fundamental mistake. It is the Judge's approach which seems to me, to use his word, "artificial" in assessing whether the contract can stand, not by reference to the circumstances and time when it was made, but on the basis that Mr Boonen would have to be shown to be aware *in advance* that the only circumstances in which a contract could come into existence at his deep prices would be if some fundamental mistake occurred. That prevents any assessment of the validity of computer-made contracts as and when made, and potentially enables traders to make what an honourable and reasonable trader would, I

believe, identify as an unjustified windfall – and would expect to forego because it was such.

201 In the present case, there can only be one answer to the question of what any reasonable trader with knowledge of the market circumstances would have thought. There was not and never has been any suggestion that Mr Boonen's very unusual or unfathomable market developments occurred. The only explanation of the transactions, whether hypothesised in advance, observed concurrently or considered early next morning, was and is major error – as B2C2 at once saw.

202 Mr Boonen was very well informed about actual world and market circumstances. The Judge recorded (at [102]):

> … He explained that B2C2 was connected to 15 exchanges at the time, on some of which up to ten pairs were traded. The market for BTC/ETH on the Platform was relatively small …

As to Mr Boonen's state of mind when next morning he observed the overnight trades, the Judge recorded (at [114]):

> … Mr Boonen gave evidence that he was surprised when he first saw that the orders had been filled and that he considered the possibility that there was an error on the Platform or an error in the B2C2 system. Having checked that there were no apparent errors in either system he thought "Wow, there must have been something incredible happened [*sic*] in the market overnight".

Mr Boone's reaction that something incredible must have happened in the market overnight cannot have lasted more than a second, since his connection to fifteen world exchanges would have informed him that no such thing had happened.

203 Curiously, but very relevantly on this appeal, the Judge also omitted from the Judgment reference to one key document which above all others gives a key to Mr Boonen's actual state of mind, on learning of the transactions next morning. He sent the email at 6.15am to Quoine's support team requesting that it call B2C2 urgently as he had detected a "Major Quoine database breakdown". That is what the Judge said he could well understand might be the reaction of an ordinary trader on the Platform, and it was evidently what Mr Boonen thought. The present case is one, in my judgment, where any reasonable trader would expect the general law to afford relief, as it does in more conventional cases of mistake.

Unconscionability

204 In so far as it is suggested that unconscionability is a pre-requisite to equitable relief, I would repeat what is indicated at [178] above. First, the present situation is one where the primary vitiating factor relied on is mistake, and, second, it is not one where relief is being sought on the basis of constructive notice. The question in the present case is not whether B2C2 had constructive notice, because constructive notice depends, like actual knowledge, on human involvement during the relevant transaction. The present case is one where the law needs to fashion an appropriate principle to cater for a situation where it is clear that there would have been actual knowledge of mistake had the actual transactions been foreseen in advance or had there been human involvement at the time (and where it is also the fact that there was such knowledge as soon as they were discovered). Unconscionability in bringing about the transactions cannot and should not have a role in relation to this novel situation, which is, as I have indicated at [178], closer to one of actual knowledge than of constructive notice. I add that is unnecessary on the facts to consider in this case whether equitable relief would extend to the (probably unlikely) situation in which all

that could be affirmed was that the party in B2C2's position, knowing of the transaction against the relevant market background, *should* have realised that it had only come about as a result of some fundamental error. In this case, it can unhesitatingly be affirmed that B2C2 would actually have realised this, and did do so as soon as it knew of the transaction.

205 To the extent that unconscionability may be relevant, it is in my view clearly unconscionable in the present context of unilateral mistake for a trader to retain the benefit of transactions which he would – and did – at once recognise as due to some major error as soon as he came to learn of them. This parallels the analysis taken, in my view appropriately, by the Court of Appeal of British Colombia took in *256593 BC Ltd* at [26]–[28], and is consistent with other statements of principle: see [172]–[175] above. I may also be forgiven for quoting here from a judgment of my own in the area of unjust enrichment – *McDonald v Coys of Kensington* [2004] EWCA Civ 47. In that case, a purchaser insisted on holding onto a valuable registration number plate or mark (with the initials TAC 1) for which he had not contracted and which had remained on the vehicle as transferred to him by a mistake on the part of the vendor. The issue was whether the purchaser had been unjustly enriched. His defence was that he had done nothing wrong and had simply acquired the number plate as part of the car which was now his. Giving the sole reasoned judgment of the Court of Appeal of England and Wales and holding that he had been unjustly enriched, I said this at [37]:

> Looking at the matter generally, I have no doubt that justice requires that a person, who (as a result of some mistake which it becomes evident has been made in the execution of an agreed bargain) has a benefit or the right to a benefit for which he knows that he has not bargained or paid, should reimburse the value of that benefit to the other party if it is readily returnable without substantial difficulty or detriment and he chooses to retain it (or give it away to a third party) rather than to re-transfer it on request. Even if realisable benefit alone is not

> generally sufficient, the law should recognise, as a distinct category of enrichment, cases where a benefit is readily returnable. A person who receives another's chattel must either return it or pay damages, commonly measured by reference to its value. The mark is not a chattel, and it was not suggested before us that its return could at any stage (even before the gift to the partner) have been enforced, or that its non-return could sound in damages. (There were allegations below of implied duties to co-operate in the return of the mark, but the judge did not accept them, and there is no appeal in that respect.) However, Mr McDonald's insistence on keeping the mark and the absence of any obvious means of compelling its re-transfer are reasons for analysing this case in terms of unjust enrichment. Mr McDonald knew that he had not bargained or paid for the mark. The mark or its benefit was in practice easily returnable. If Mr McDonald chose to keep it, then I see every reason for treating him as benefited.

206 In my opinion, a parallel analysis applies here. Equity will look at all aspects of a transaction. If it is immediately obvious that a mistaken transfer has occurred, a failure to do the honourable thing and return the benefit can be as unconscionable as the conduct of someone who plays some positive part in bringing the transaction about.

Conclusion

207 In these circumstances, and on the basis that the test in law is that which I have suggested it should be, the claim that the transactions were voidable for unilateral mistake should have succeeded. I would have allowed this appeal accordingly.

Jonathan Mance
International Judge

Stanley Lai SC, Ong Min-Tse Paul, Lim Jun Rui Ivan and Marrissa Miralini Karuna (Allen & Gledhill LLP) for the appellant; Ong Tun Wei Danny, Ng Hui Ping Sheila, Zhuang Wenxiong and Teo Jason (Rajah & Tann Singapore LLP) for the respondent; Professor Goh Yihan (Singapore Management University) as *amicus curiae*.

Case No: 7942 of 2008

Neutral Citation Number: [2010] EWHC 2914 (Ch)
IN THE HIGH COURT OF JUSTICE
CHANCERY DIVISION
COMPANIES COURT

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: 19/11/2010

Before :

MR JUSTICE BRIGGS

- -

Between:

IN THE MATTER OF LEHMAN BROTHERS INTERNATIONAL (EUROPE) (IN ADMINISTRATION)
AND IN THE MATTER OF THE INSOLVENCY ACT 1986

(1) STEVEN ANTHONY PEARSON
(2) ANTHONY VICTOR LOMAS
(3) MICHAEL JOHN ANDREW JERVIS
(4) DAN YORAM SCHWARZMANN
(5) DEREK ANTHONY HOWELL
(The Joint Administrators of Lehman Brothers International (Europe) (In Administration))

Applicants

- and -

(1) LEHMAN BROTHERS FINANCE SA
(2) LEHMAN BROTHERS COMMERCIAL CORPORATION ASIA LIMITED
(3) LEHMAN BROTHERS ASIA HOLDINGS LIMITED
(4) LEHMAN BROTHERS INC.
(5) LEHMAN BROTHERS SPECIAL FINANCING INC.

Respondents

- -

APPEARANCES

Mr Iain Milligan QC, Mr Guy Morpuss QC, Mr Daniel Bayfield & Mr Socrates Papadopoulos (instructed by **Linklaters LLP**) for the Joint Administrators

Mr Gabriel Moss QC & Mr William Willson (instructed by **Herbert Smith LLP**) for Lehman Brothers Finance SA

Mr Robin Dicker QC & Mr Tom Smith (instructed by **Mayer Brown International LLP)** for Lehman Brothers Commercial Corporation Asia Limited and Lehman Brothers Asia Holdings Limited

Mr Michael Brindle QC & Mr Nik Yeo (instructed by **Norton Rose LLP**) for Lehman Brothers Inc

Mr Philip Jones QC & Mr Giles Richardson (instructed by **Weil, Gotshal & Manges LLP**) for Lehman Brothers Special Financing Inc

- -

Hearing dates: 11th – 29th October 2010

Judgment

Mr Justice Briggs:

INTRODUCTION

1. This application by the Administrators of Lehman Brothers International (Europe) ("LBIE") seeks the court's directions as to the principles governing the beneficial ownership, as between LBIE and a number of its affiliates within the Lehman group, of securities which LBIE had, prior to the onset of its administration, acquired from third parties ("the street") for the account of those affiliates and which, vis-à-vis the rest of the world, still remain vested in LBIE.

2. The securities comprise a broad range, including both fixed income and equities. The overwhelming majority of them are in dematerialised form, in relation to which LBIE's ownership, as against the rest of the world, consists of a chose in action represented by a credit in LBIE's account (a "depot") with a clearing house, depository or custodian (collectively "depositories"). A small minority consist of shares with physical documentary title, either registered or bearer, in respect of which legal title was generally vested in a nominee, which may also be regarded as a depository for present purposes.

3. LBIE acquired the relevant securities pursuant to a global settlements practice which had been instituted generally within the Lehman Brothers group ("the Group") in the early 1990s. By then, the Group conducted a truly worldwide securities business, operating in numerous different and widely separated time zones including, most importantly for present purposes, Europe, the USA and the Far East. Put shortly, the essence of the global settlements practice was that the Group identified a single group company (a "hub company") in each main time zone into which all securities acquired in that time zone were settled on acquisition, and from which all such securities were transferred on re-sale to the street. LBIE was the designated hub company for securities bought and sold in Europe, regardless of whether it or one of its affiliates around the world was to enjoy the economic risks and rewards of ownership, including rises and falls in value, and the intermediate income, whether by way of coupon or dividend.

4. The global settlements practice applied not merely to securities bought and sold as part of a trading strategy designed to yield profits in its own right, but also to securities bought and sold by way of the hedging of the risks arising from the derivatives businesses of particular affiliates.

5. It was also (or became) Group policy not merely to hold securities between acquisition and re-sale, but to use them for the raising of finance for the Group by lending them to the street in the meantime. Again, the Group designated the same hub companies for the carrying on of this activity as it did to the acquisition and sale of the underlying securities, regardless of the identity of the affiliate for which the securities had been acquired and were held. Thus, all lending of securities to the street in Europe for the raising of finance was carried out by LBIE, and LBIE did not account to specific affiliates for the substantial economic benefits obtained by the use of securities acquired for the affiliate's account in connection with that activity. By contrast, LBIE did account to affiliates for all intermediate income received from securities held for their account between acquisition and re-sale.

6. The concentration of the acquisition, sale and lending of securities within one Lehman hub company within each main geographical area of the Group's activities was perceived to be very beneficial to the Group in terms of efficiency and economy, but it was also perceived to create, at least potentially, three problems for the hub company. The first ("the capital charge problem") was that to the extent that the hub company paid the acquisition price for securities on settlement with the street, against an unsecured debt for the same acquisition price owed to it by the affiliate for which it had been purchased, the hub company faced a regulatory capital charge which, at least in the case of LBIE and Lehman Brothers Inc ("LBI"), the New York hub company, amounted to 100% of the amount of the unsecured debt.

7. The second problem ("the segregation problem") was that the hub company might, unless a regulatory exception applied, be required to segregate securities acquired for the account of third parties (including affiliates) rather than, as was the Group's practice, for the hub company to hold all securities acquired both for itself and its affiliates in un-segregated house accounts.

8. The third problem ("the financing problem") was that the use of securities for the raising of finance by lending to the street required the hub company to be able to transfer absolute and unencumbered title to its street counterparty, whether under re-purchase transactions ("repos") or stock loans, and it was perceived that if the effect of the acquisition of securities by a hub company for an affiliate was to confer beneficial title to the securities upon the affiliate, then the hub company might be in difficulty giving good title to the street as necessitated by financing transactions.

9. I have described these as potential problems because it is far from clear, in the early 1990s at least, that they, or any of them, rendered LBIE's centralised activities in the acquisition and sale of securities for its affiliates, or by lending to the street, impracticable, still less unlawful in regulatory terms. Nonetheless they were perceived to be of sufficient gravity, either immediately or in the near future, to give rise to the setting up of a small project group of persons within LBIE known as the Regulation and Administration of Safe Custody and Global Settlement working party, or "Rascals" for short, tasked with devising a solution to them. That catchy acronym became the label used for the identification of the processes adopted to address those three perceived problems and, in due course, as the name for this litigation.

10. The Rascals project was initiated in 1993. Following negotiations between LBIE and the affiliates for which it dealt in securities, the Rascals processes recommended by the working party began to be applied from about 1996. Rascals processes continued to be applied between LBIE and various of its affiliates until, and indeed after, LBIE went into administration on the morning of 15th September 2008. Although those processes shared certain common features, they were by no means uniform, as between LBIE and different affiliates, or in relation to different types of securities.

11. Nonetheless, and at the risk of oversimplification, the Rascals processes shared the following common features:

    i) They were applied to large classes of securities acquired by LBIE, acting as hub company, for the account of affiliates.

ii) In each case the affiliate purported to confer upon LBIE its proprietary interest (if any) in the underlying security in exchange for monetary consideration in the form of a purchase price or the deposit of monetary collateral, leaving the affiliate with a contractual right against LBIE to recover its proprietary interest in equivalent securities, again for monetary consideration, at a future date.

iii) The commercial intent (albeit not contractual obligation) of the processes was usually that they should apply for the whole or substantially the whole of the period between the acquisition of the security from the street by LBIE and its eventual re-sale to the street.

iv) The intended effect of the processes (whether or not successful) was to replace an unsecured obligation by the affiliate to refund LBIE the purchase price for the acquisition of the security from the street with a secured obligation of the affiliate to pay for its re-acquisition from LBIE of an equivalent security under the Rascals processes, whether by paying the repurchase price under the off-leg of a repo or paying back the collateral lodged during the currency of a stock loan (repos and stock loans being the two types transaction alternatively used by all the Rascals processes).

12. It will be unnecessary for me to describe every form of Rascals processing used within the Group between the mid-1990s and its collapse in 2008. Nonetheless a brief description of the two principal methods of Rascals processing extant immediately prior to the collapse will serve by way of introduction to make intelligible the issues which have arisen thereafter. The first, Automatic Rascals, was applied mainly to fixed income securities. As its name implies, it was not merely automatic by 2008, but fully computerised, so that the series of daily repeated transactions between LBIE and the relevant affiliates were entered into and settled entirely electronically, without the need for any human intervention on either side.

13. On the day of the settlement of LBIE's acquisition of the security from the street, LBIE and the affiliate entered into a repo contract, providing for the immediate sale of the security by the affiliate to LBIE for a fixed price in fact equivalent to its value that day ("the on-leg"), followed by a sale back of an equivalent security by LBIE to the affiliate on the following day at the same price plus an interest charge or fee ("the off-leg"), with LBIE having the right of use of the security in the meantime.

14. On the following day LBIE and the affiliate would enter into a replacement repo, in all respects identical to the first, save that the price would be fixed by reference to the marked to market value of the security on that day. This process would then be repeated on every subsequent day of the period during which the security (or its equivalent) was held, until and including the day before the settlement of the eventual sale of the security back to the street. Thus, the settlement of that sale would coincide with the off-leg of the last in the series of computer-generated repo transactions between LBIE and the affiliate.

15. Pursuant to master agreements between LBIE and each of its relevant affiliates, the repo transactions under Automatic Rascals were on industry standard terms, pursuant to which title to the underlying security was not to pass either under the on-leg or the off-leg of the repo until payment. I note in passing that this feature of Automatic Rascals was common ground before me, save that it was challenged by Lehman

Brothers Finance SA. ("LBF") in relation to the off-leg. As will appear, I have rejected that challenge, for reasons which will follow.

16. It was not the intention of the designers of Automatic Rascals that the purchases and re-purchases constituted by the on and off-legs should be cash settled. Rather, payment and repayment was intended to be achieved, in form by what I shall loosely call book entries, but in substance by a series of successive offsets. Thus, the affiliate's debt to LBIE for the acquisition price of the security from the street was largely offset by LBIE's debt to the affiliate on the on-leg of the first repo. The affiliate's debt to LBIE under the off-leg of the first repo was in turn largely offset by LBIE's debt to the affiliate on the on-leg of the second repo. These offsets continued until the settlement of the sale of the security to the street, whereupon the affiliate's debt on the off-leg of the last repo was largely offset by LBIE's obligation to account to the affiliate for the proceeds of the sale of the security back to the street.

17. I have throughout that summary used the phrase "largely offset" to reflect the fact that the cross debts were not necessarily, or even usually, identical. Differences would arise from the constantly changing value of the underlying security, and the fixing of the repo prices by reference to its marked to market value from time to time. Thus for example, a rise in the value of the security between the trade date and the settlement date of the acquisition from the street would mean that LBIE's debt on the first on-leg would exceed the affiliate's debt in relation to the purchase price, and vice versa. Similar changes were caused by marked to market movements during the series of daily repos, and by any disparity between the sale price of the security on the trade date, and its marked to market value on the settlement date, back to the street. Other differences would arise from fees and interest charges arising under the repos being added to the amounts payable.

18. I have in the same phrase used "offset" rather than set-off to record the fact that, in the parties' accounting records, the nearly equal but opposite credits and debits between LBIE and each affiliate were not immediately cancelled by journals and replaced by a net balance. I shall describe in due course how the opposing entries were in due course dealt with. The question whether the offsetting entry (such as LBIE's debt to an affiliate for the on-leg of the first repo) can properly be said to have paid *pro tanto* the original debt (such as the affiliate's debt to LBIE for the acquisition price of the security from the street) has been the subject of keen debate, to which I shall return.

19. Manual Rascals, as its name implies, was triggered only by human intervention, and was a process (or the label for a process) mainly applied to equities. An equity purchase by LBIE for an affiliate from the street selected for Manual Rascals processing would be made the subject of a stock loan by the affiliate back to LBIE. By contrast with the daily repos, the stock loans (also on standard industry terms) were open-ended. They provided for transfer by the affiliate of its title to the security back to LBIE in exchange for monetary collateral, with a right in the affiliate to reacquire title to an equivalent security upon payment of the collateral back to LBIE, with small adjustments for a stock loan fee and/or an interest charge in relation to the collateral and provision for margining adjustments to the collateral during the life of the stock loan, to reflect changes in the marked to market value of the security. Manual Rascals therefore required no daily repetition of transactions between acquisition and resale of the security from and to the street. Furthermore, the evidence does not enable it to be said with confidence that Manual Rascals was

invariably or even usually applied to a security on the day of the settlement of its acquisition from the street.

20. As with Automatic Rascals, it was not envisaged by the designers of the process that cash collateral would actually be delivered by LBIE on the making of the stock loan, or physically redelivered by the affiliate upon its termination. Rather, payment was, again, to be recorded in book entries, but achieved by offset. LBIE's obligation to lodge collateral was intended to be achieved by an offset against the affiliate's debt for the price of the acquisition from the street. Similarly, the affiliate's obligation to repay collateral at the end of the stock loan was to be offset against LBIE's obligation to account for the proceeds of the sale of the security to the street. Again, these offsets were not precise, due to movements in the value of the underlying security by reference to which the collateral was calculated, between the original trade date for the acquisition and the settlement of the sale, in each case with the street.

21. I have throughout this summary described the subject matter of the Rascals repos and stock loans as if it were the very securities that LBIE purchased from the street. In fact it was in each case the beneficial interest (if any) of the affiliate in the securities, of which LBIE remained the owner as against the street throughout the process. LBIE remained the account holder recognised by the depositary from start to finish, and the Rascals process was therefore entirely internal, within the Group, and invisible to the rest of the world, although its perceived consequences were reflected in the Group companies' regulatory reporting, and in their published accounts.

22. This litigation is, as I have said, concerned only with securities still within LBIE's depots which were, when it went into administration, the subject of one or other of the Rascals processes which I have summarised. In relation to Automatic Rascals, the computers which generated the stream of daily repos did not cease to do so by virtue of the Administration Order, nor is it suggested that the Order itself deprived the subsequent automated electronic workings of that computer programme of contractual efficacy. The automatic process continued until 23rd September 2008, when a manual intervention by an employee of LBIE (which I shall describe in detail in due course) prevented any new repos being made thereafter, with the consequence as a matter of form that all existing repos ended with their off-legs scheduled for that day.

23. As for Manual Rascals, the stock loans by which that process was applied simply remained open when LBIE went into administration, there being no provision in them, or in the parties' computer systems, for automatic off-legs.

24. It is by no means the case that all Rascalled securities which LBIE had acquired for affiliates but not re-sold for the affiliates to the street prior to LBIE going into administration remain in LBIE's depots now. Large numbers of them had been lent to the street by LBIE, and its insolvency meant that LBIE was unable to reacquire equivalent securities from its street lending counterparties due to its inability to pay the repurchase prices under repos or return the collateral under stock loans. Those which remain in LBIE's depots, and which are the subject matter of this application, therefore constitute a small and unrepresentative subset of those which were subject to Rascals processing when the Group collapsed.

THE ISSUES

25. The trial of this application for directions has taken the form of a straight adversarial fight between LBIE by the Administrators on the one hand and five of its affiliates on the other. By contrast with some earlier applications for directions, the Administrators have not at any stage in this application assumed a neutral role. On the contrary, they claim that LBIE is beneficially entitled to all the Rascalled securities remaining in its depots, to the exclusion of any of its affiliates.

26. For their part, the respondent affiliates each claim beneficial title to all those securities remaining in LBIE's depots acquired by LBIE for their separate accounts, to a large extent on overlapping legal arguments, but based upon the detailed separate facts about LBIE's relationship with each of them.

27. The first main area of dispute concerns the beneficial ownership of securities acquired by LBIE for the affiliates' account before the Rascals processes were applied to them. The first plank in the Administrators' case is that the global settlements practice by which LBIE acquired from the street securities for the account of affiliates was neither capable as a matter of law, nor intended, to confer beneficial title upon affiliates in relation to any of the securities acquired, entirely regardless of the Rascals processes. It being common ground that a beneficial interest in an affiliate necessitates a trustee beneficiary relationship between LBIE and the affiliate, the Administrators say that the supposed trust necessarily fails in every case due to uncertainty of subject matter or uncertainty of terms. They say that the objective common intention of both LBIE and its affiliates was that the affiliates should obtain the economic risks and benefits of an owner of the underlying securities not by the transfer of ownership (in the sense of a proprietary interest) but by the creation of purely contractual rights and liabilities between LBIE and the affiliates having the same economic effect, as it were, synthetically.

28. This is roundly challenged by the affiliates, each of which claims (albeit by reference to slightly different facts) that LBIE acquired or settled the acquisition of securities for each of them as broker or settlement agent on terms which ordinarily imply the holding of the underlying securities on trust for the affiliate principal, and that there are no facts which suggest any different outcome. On the contrary, they each say that the essential predicate of the Rascals process was that, but for it, the beneficial interest in the underlying securities was intended and assumed, as between LBIE and the affiliate, to lie with the affiliate.

29. Save for that last point, all the parties to this application have invited me to address this first issue by a close legal and factual analysis of the global settlement practice upon the counter-factual assumption that, for this purpose, the Rascals process can temporarily be ignored. They appear to have done so mainly for their own tactical reasons. There were numerous securities acquired by LBIE for affiliates (and held in its depots when the Group collapsed) to which Rascals processes were not applied, but they are, by definition, not the subject matter of this application. As will appear, I have considerable reservations as to the utility of addressing the effect of the Group's global settlement practice upon the beneficial ownership of Rascalled securities on the counter-factual hypothesis that Rascals processes were not intended to be, and were not, applied to them.

30. The second main area of dispute concerns the effect upon beneficial entitlement to Rascalled securities on the assumption, contrary to the Administrators' primary case, that but for Rascals processing, the beneficial interest in the securities would have vested in the affiliates. The Administrators' case is that the Rascals process did what it said on the tin, that is, transfer any beneficial interest of the affiliates in the Rascalled securities to LBIE, that this is where the beneficial interests lay when the Group collapsed, and that the aftermath, including the switching off of the Automatic Rascals process, brought about no subsequent re-transfer of beneficial interests back to the affiliates.

31. The bones of the Administrators' case in this respect are that:

i) LBIE paid by offset for the transfer of title from the affiliates by each repo on-leg and stock loan, and that the beneficial interests resided in LBIE continuously thereafter.

ii) On 15th September 2008 those beneficial interests were therefore with LBIE.

iii) That none of the affiliates (all of which were also insolvent) paid LBIE for the repurchase of securities under the final repo off-legs under Automatic Rascals which occurred on 23rd September 2008, with the consequence that title remained with LBIE.

iv) Alternatively that the manual intervention into the computerised Automatic Rascals process was invalid because it was not authorised by the Administrators.

v) That all Manual Rascals stock loans have remained open since the onset of LBIE's administration.

vi) That in any event no affiliate has been able to repay the collateral provided by LBIE under the stock loans, with the consequence that, pursuant to their terms, title has not passed back to the affiliates.

32. The affiliates' case in relation to the Rascals part of the dispute may be broadly summarised as follows, although the factual basis for each affiliate's case is divergent.

i) That LBIE never paid for any of the repo on-legs or lodged collateral for any of the stock loans, there being no available off-set in the form of a debt due from the affiliate for the acquisition price from the street, as a result of the Group's inter-company finance arrangements, with the consequence that beneficial title never passed to LBIE under the Rascals processes, Automatic or Manual.

ii) That even if title did pass, it reverted under Automatic Rascals to the relevant affiliates on the final off-leg on 23rd September 2008 or, in the case of certain affiliates, slightly earlier.

iii) That in relation to Manual Rascals, there arose a resulting trust in favour of the relevant affiliate once the alleged purpose of Manual Rascals (namely to

enable LBIE to use the underlying securities to raise trade finance in the street) became incapable of fulfilment by virtue of LBIE's going into administration.

33. In addition to those general arguments, the second and third respondents (being members of the Group's Far Eastern enterprise) have additional arguments, peculiar to them, as to why the Rascals processes failed to achieve their intended purpose, arising from complicated inter-company novation and netting arrangements applicable to the Group's Far Eastern operations.

34. It is no small irony that the primary cases of all the protagonists involve treating the Rascals processes as, in effect, a complete waste of time and effort. On the Administrators' primary case the Rascals processes were entirely unnecessary, because beneficial title in the underlying securities never passed to the affiliates in the first place. On the primary cases of all the respondents the Rascals processes simply failed to achieve their intended purpose, because for a variety of reasons the assumptions upon which they were based were incompatible with the pattern of financial dealings between the parties, established either by agreement or by invariable practice reflected in book entries.

35. It is, at least at first sight, counter-intuitive to think that one of the largest and most sophisticated investment banking institutions in the world, staffed by some of the foremost experts in the business and advised by the most eminent law firms, should have spent more than a decade solemnly entering into countless thousands of mutual transactions which were either completely unnecessary, completely ineffective or both. The suspension of disbelief called for by the parties' primary cases has not been easy.

36. The question whether the Rascals processes were necessary has called both for a close analysis of the operation of the Group's global settlement practice, and also a study of the legal question whether the recognition in English law in Hunter v. Moss [1994] 1 WLR 452 that there can be a trust of part of an un-segregated mass of fungibles is sufficiently flexible to be capable of being applied to the constantly fluctuating mass of security interests appearing in LBIE's un-segregated house depot accounts with its depositories.

37. The question whether, if the Rascals processes were necessary to confer upon LBIE beneficial title to the underlying securities, they were effective for that purpose has called for a minute examination both of the contractual structures put in place between LBIE and each of the respondents (together with other affiliates) and the accounting records employed by the Group for the purpose of recording their financial dealings, including but not limited to those constituted by the Rascals transactions.

THE FACTS

38. By contrast with most other applications by the Administrators to date, the present case has not proceeded upon the basis of assumed facts. Rather, the parties have helpfully agreed some of the relevant facts, albeit only for the purposes of this application. Others have been the subject of dispute, to the extent that there has been a limited amount of cross-examination. Nonetheless the parties have sensibly deferred to a later stage in the administration all detailed questions as to whether, and if so precisely how, the Rascals processes were applied to specific securities. The

purpose of this application has been to obtain directions as to the legal consequences, in terms of the beneficial ownership of securities, of their having been processed in accordance with certain recognisable patterns, both in terms of security transactions and the parties' accounting for their financial consequences.

39. Since there has been no precise correspondence between the manner in which LBIE dealt with each of the five respondent affiliates which have claimed beneficial interests in the relevant securities, either in terms of contract or accounting records, it has been necessary to consider the relationship between LBIE and each affiliate separately, both in terms of the deployment and testing of evidence, and in this judgment.

40. The documentary evidence has fallen into three main classes:

i) A small number of memoranda and communications generated in connection with the carrying out of the Rascals project in the early to mid-1990s;

ii) The written agreements made from time to time between LBIE and the relevant affiliates (including but not limited to the respondents) relevant to the Rascals processes and the parties' funding arrangements;

iii) The parties' accounting records. These were for the most part computerised, and presented in court in the form of helpfully selective screenshots with appended (and usually un-contentious) interpretative notes.

41. The oral evidence has consisted of two main strands. First, some of those employees within the Group involved in the planning, implementation and subsequent operation of the Rascals processes have given evidence. Since the processes were originally planned and put in place more than ten years ago the first hand recollection of most of them has been understandably limited.

42. The second main strand has consisted of the essentially interpretative evidence both of members of the teams of professionals now engaged in the insolvency processes affecting each of the parties and in addition some former Group employees experienced in operating or studying the Group's accounting records and therefore qualified to assist the court in their interpretation. There has finally been evidence about the circumstances in which the Automatic Rascals processes were, in effect, switched off on 23rd September 2008, directed to the question whether the switching off was authorised by the Administrators.

43. As might be expected of mainly professional persons with no particular axe to grind, all the witnesses did their considerable best to assist the court both with their recollection and their interpretation of technical accounting records. Both individually and collectively they provided very considerable assistance to the court, not least because of the readiness of most of them, when challenged, to acknowledge instances where, mainly due to continuing research, conclusions or assumptions in their earlier written evidence called for qualification or amendment.

44. This has not been to any significant extent a case in which the outcome of issues of fact has turned upon the relative skill, competence, demeanour or integrity of different witnesses. Nonetheless I should briefly mention the evidence of Mrs Lisa Greenway

who, in no less than eight successive witness statements, undertook on behalf of the Administrators the main burden of providing a detailed explanation of the Rascals processes and the interpretation of the Group's accounting records. She augmented that evidence in chief and was cross-examined at some length by counsel for each of the respondents.

45. Mrs Greenway joined the Lehman Group in 1992 and worked continuously for it until its collapse, in a wide variety of different roles of increasing seniority in London, mainly but not exclusively for LBIE. Following LBIE's entry into administration she was appointed by the Administrators as an Executive Director in LBIE's Administration Intercompany Team. Her presentation of the Rascals processes and her interpretation of the Group's accounting records was mainly the product of the work carried out by herself and her team during LBIE's administration. Her work for the Group prior to the collapse had not brought her into close contact with the Rascals processes, or with the Group's financial recording of Rascals and its effect. Nonetheless her long familiarity with the Group's accounting systems over many years well qualified her to present and interpret them to the court, her experience in what cross-examining counsel described as "the university of life" more than making up for her lack of any specific accountancy qualifications beyond A level maths and economics.

46. Generally, Mrs Greenway's presentation and interpretation of the Rascals processes and the Group's accounting records was reliable, subject only to certain occasions when she and her team drew conclusions from their research which, after cross-examination, turned out not to be supported by the underlying documents, or any other evidence, or which were undermined by subsequent more detailed research carried out by others. Those specific instances did not undermine the generality of her evidence as a careful, unbiased, honest and intelligent presentation of an extremely complex subject, fully deserving of the court's gratitude.

THE PARTIES

47. The following brief description of the parties, and of the Group of which they formed part, relates to the period immediately prior to the Group's collapse in September 2008. It is not suggested that any differences from that description at any earlier date are relevant to the issues which I have to decide although, of course, the securities with which this application is concerned were acquired from the street during a period of some years prior to the collapse.

48. The Lehman Group was in 2008 one of the four biggest investment banks in the United States, the core of its business being global investment banking, including the provision of financial services to corporations, governments and municipalities, institutional clients and high net worth individuals. It organised its business activities in three segments, namely capital markets, investment banking and investment management. Those segments included equity and fixed income sales, trading and research, capital markets and advisory financing, asset management, principal investing and private equity.

49. The Group sought to present itself to the world, and to organise itself internally, as a single integrated business enterprise, rather than as a collection of separate legal entities all pursuing their own affairs in isolation from each other. Nor were its

separate legal entities confined to trading only in their countries of incorporation. Many of them, including all but one of the parties to this application, carried on business activities on a global rather than merely national or regional basis.

50. Nonetheless, the tendency of financial services regulation to operate on national lines, the differences in national fiscal systems and the requirements of those dealing with the Group as clients, customers or trading counterparties meant that, for numerous purposes, the identity of Group companies as separate legal entities with principal places of business in particular jurisdictions was of unavoidable importance, both as a matter of internal organisation and external dealings.

51. The ultimate parent company within the Group was Lehman Brothers Holdings Inc. ("LBHI"), a Delaware corporation with its headquarters in New York. For present purposes, its importance is that it provided a treasury function, including day to day cash-flow management, throughout the Group either directly or (due to regional netting arrangements) indirectly. The contractual regime for the provision of that treasury function, and its (not always consistent) application over time forms an important plank in the respondents' case that the Rascals processes were ineffective.

52. One consequence of the Group's endeavours, within limits, to conduct an integrated business was that its staff were not invariably, or even usually, employed exclusively to conduct the business affairs of individual affiliates. Thus for example, the manager of a trading desk in a particular geographical location would be likely to deal in securities or particular types for a number of different Lehman entities, commonly in pursuit of a Group business strategy rather than on a strictly entity by entity basis. Thus while a particular entity might appear from its financial statements to conduct business on an enormous scale, it might have a very small number of the Group's staff devoted solely to its affairs, relying on the non-exclusive services of a very large number of others for the conduct of its trading activities. This is, as I shall describe, particularly true of one of the respondents, LBF.

LBIE

53. LBIE was the Group's principal trading company in Europe. It provided a wide range of financial services to clients including trading and broking, equity and fixed income securities and dealing in financial derivatives. It traded in securities for its own account, for the account of Lehman affiliates, including the respondents, and for its own clients. It maintained depot accounts with the main European securities depositories including, in particular, Euroclear. LBIE maintained both house accounts and segregated accounts with its securities depositories. Pursuant to the global settlement practice which I have described, LBIE settled all securities trades for its affiliates into house accounts rather than segregated accounts.

54. LBIE went into administration on 15th September 2008. LBIE's case has been presented, through the Administrators, by Mr Iain Milligan QC, Mr Guy Morpuss QC, Mr Daniel Bayfield and Mr Socrates Papadopoulos.

Lehman Brothers Finance SA ("LBF")

55. LBF is a Swiss company with a core business consisting of the entry into OTC equity derivatives transactions, either directly with the street or via other Group companies

on a back to back basis. By 2008 LBF carried on approximately 50% of the Group's total business of that type. Despite the enormous size of its business, LBF's board consisted only of three non-executive directors, and it enjoyed the exclusive services of only about a dozen staff. Its day to day business activities were transacted on its behalf by Group staff employed by other entities, working mainly outside Switzerland, and in particular at LBIE's premises in London, on a non-exclusive basis.

56. LBF's business model was constructed in such a way as to maximise its efficiency and profitability from a regulatory and fiscal perspective. It was not subject to regulation by the Swiss Financial Market Supervisory Authority ("FINMA"), nor did it hold a banking licence. Its customers included other Lehman affiliates and professional market participants from the street worldwide. Its non-regulated status meant that it did not incur regulatory capital charges when entering into OTC derivatives transactions and it also enjoyed a valuable commercial stock exemption from Swiss stamp tax in relation to its dealings in securities for hedging purposes.

57. LBF's hedging activities required it to establish both long and short positions in securities. Subject to certain minor exceptions, it did not hold securities or security positions through depot accounts of its own with depositories. Rather it used the depots established by LBIE (for European securities), LBI (for USA securities) and other affiliates elsewhere. It also used employees of (or located at the premises of) the Group hub companies for the implementation of its trading strategies, including its hedging activities.

58. On 22nd December 2008 LBF was placed into a Swiss bankruptcy process on the application of FINMA, PricewaterhouseCoopers AG being appointed as its bankruptcy liquidator. It has appeared on this application by Mr Gabriel Moss QC and Mr William Willson.

<u>Lehman Brothers Commercial Corporation Asia Limited ("LBCCA") and Lehman Brothers Asia Holdings Limited ("LBAH")</u>

59. LBCCA and LBAH are two of the Lehman Group entities based in the Far East. LBCCA's business was proprietary trading and investment, and LBAH was the primary provider of inter-company funding for Lehman Group entities in the Asia Pacific region, standing for that purpose between the Far Eastern trading entities and the Group treasury function provided by LBHI. Both companies were based and incorporated in Hong Kong. European securities acquired for the account of LBCCA were routinely settled by LBIE and held in its house depot accounts. For reasons which I shall explain in detail later, LBAH came to be used as LBIE's counterparty for the Automatic Rascals processing of such securities.

60. LBCCA and LBAH were both placed into provisional liquidation by the High Court of Hong Kong Special Administrative Region on 19th September 2008 and the same three partners in KPMG China were appointed as provisional liquidators of each of them. They have both appeared by the same team of solicitors and counsel in these proceedings led by Mr Robin Dicker QC and Mr Tom Smith. If otherwise successful in claiming beneficial ownership of relevant securities as against LBIE, they do not require any issue as to title as between them to be resolved on this application.

Lehman Brothers Inc. (“LBI”)

61. LBI was a registered broker dealer in the USA trading in a variety of financial instruments including equity and fixed income securities. It was the Group’s hub company for the USA and the rest of North and South America, and therefore performed a similar function within that geographical area in terms of the settlement and holding of securities that LBIE performed for the Group within Europe. For present purposes LBI is joined as a respondent not because of its activities as a hub company but because LBIE settled and held European securities for its account.

62. There is an issue whether transactions which may properly be described as Rascals processes were applied to any of the relevant securities, as between LBIE and LBI. Nonetheless it is clear that a very small number of surviving relevant securities (that is, still held in LBIE depots) were the subject of open stock loans by LBI to LBIE when the Group collapsed. It is common ground that, as between LBIE and LBI, this application is about those securities, whether or not the stock loans were strictly part of the Rascals process.

63. On 19th September 2008 the United States District Court for the Southern District of New York appointed James Giddens as the trustee for the liquidation of LBI under the United States Securities Investor Protection Act of 1970. Mr Giddens was, pursuant to that order, authorised to litigate claims for the recovery of property on LBI’s behalf. LBI appeared on this application by Mr Michael Brindle QC and Mr Nik Yeo.

Lehman Brothers Special Financing Inc. (“LBSF”)

64. LBSF was the principal Lehman Group company engaged in fixed income OTC derivatives business, typically interest rates swaps, credit default swaps and other derivative products based on fixed income securities such as government and corporate bonds. It was an unregulated entity and, as a result, unable to trade at all on markets which limited trading to regulated entities, and in relation to European securities used LBIE to enter into such trades for its account. Even where it could trade in its own name in securities, LBSF used LBIE for the settlement of securities trades into LBIE’s house depot accounts in accordance with the global settlements practice. The securities to which LBSF claims title were acquired mainly in the pursuit of LBSF’s hedging strategies.

65. In numerous respects, LBSF’s position in relation to the issues on this application matched that of LBF. Nonetheless, because LBF’s hedging was mainly in equities whereas LBSF’s was mainly in fixed income securities, the two companies’ main economic interests in the litigation concern Manual and Automatic Rascals respectively.

66. LBSF made a voluntary filing for bankruptcy under Chapter 11 in the United States Bankruptcy Court for the Southern District of New York on 3rd October 2008. It appeared on this application by Mr Philip Jones QC and Mr Giles Richardson.

THE GROUP BOOK-KEEPING SYSTEMS

67. Throughout the period relevant to Rascals, Lehman Brothers operated a Group-wide, largely automated book-keeping system to which, prior to the collapse, each of its

affiliates had access. Three aspects of it need brief description. The first is the International Trading System ("ITS"), which was the Group's main trade settlement system for securities settled in Europe and Asia. It recorded both trades (i.e. contracts for the acquisition or sale of securities), and settlements (i.e. completion of those contracts by the transfer of the relevant securities and payment of the price).

68. ITS recorded both transactions with the street and inter-company transactions within the Group. In addition to creating trade tickets recording the essential terms of an acquisition or sale, ITS would also automatically generate appropriate accounting book entries in the books of those Group companies affected by the trade, some of which I will have to describe later in detail.

69. ITS was used as the main book-keeping platform for Automatic Rascals, and was, subject to manual override, capable of identifying securities which LBIE had contracted to acquire for the account of an affiliate as eligible or ineligible for Automatic Rascals treatment. Eligible securities were then subjected to daily repos by the ITS system without any human intervention, in terms both of the creation of trade tickets and of all appropriate accounting book entries. Following the collapse, ITS has continued to be available for inspection by the Administrators and, albeit not always to the same extent, by the office-holders of the respondents.

70. ITS was, in relation to book entries, in effect a sub-ledger of the Group's general ledger known as DBS, from which from time to time each Group company prepared its own financial statements, eventually reflected in its audited accounts.

71. Finally, brief mention must be made of a further IT system used by the Group's financing businesses outside the USA, called Global 1. It was the principal means of recording the stock loan activity in respect of non US issued securities between members of the Lehman group, as well as stock loans entered into by members of the Lehman group with external counterparties in the street. Since the collapse it has been only sporadically available to parties other than the Administrators.

LBIE'S USE OF SECURITIES HELD FOR ITS AFFILIATES' ACCOUNT

72. The Administrators' case that the affiliates never acquired any beneficial interest in securities held by LBIE for their account is mainly based upon the way in which, with the affiliates' consent, LBIE then dealt with those securities. In short, LBIE settled them into house rather than segregated accounts with its depositories, and the Administrators say that LBIE thereafter used them in all respects as part of its own business assets. I shall address this general assertion and its consequences in due course. At this stage, two aspects of the way in which LBIE used such securities deserve special mention. They are the use of securities held for affiliates to settle short positions, and the use of securities for lending to the street.

Short Positions

73. Securities were typically acquired by LBIE for the account of affiliates' trading books for hedging purposes or otherwise pursuant to the affiliates' trading strategies. The hedging and other strategies of those businesses would also, from time to time, require the affiliates to establish short positions.

74. In order to establish a short position for the trading book of an affiliate LBIE would sell (for the account of that affiliate's trading book) to a street counterparty securities which were not in the inventory of that trading book. It was of course necessary for LBIE to ensure that securities were available to it in order to settle the trade. LBIE could acquire the securities by borrowing stock from the street. Alternatively it could use securities that it held in its house depots either for its own account, or for the trading books of other affiliates. I infer, but this was not specifically spelt out in evidence, that LBIE could also establish short positions of its own, and meet its settlement obligations in the same way.

75. The establishment of short positions could therefore lead to LBIE having a nil position in a particular stock line in its house depot account, even though it had acquired securities of that type for an affiliate, which had yet to be re-sold to the street. To take a very simple example, a nil position might arise if LBIE acquired a hundred shares in (say) ICI for affiliate A, and then used those shares to settle a one hundred share ICI short position created for affiliate B. LBIE's books would show matching long and short positions with each affiliate, but its house depot account with the depository for ICI shares would, (assuming no other relevant transactions in that stock) be zero.

76. In real life LBIE's dealings with any particular stock in its house depot accounts were generally much more complicated than that, and nil positions may have been quite rare in practice. Nonetheless the point of the example is that, to the extent that house accounts were used to settle short positions, this inevitably generated deficiencies in LBIE's holdings of relevant stock at any given time below the simple gross aggregate of the securities held both for itself and for all relevant affiliates for the books of which it had acquired or settled that stock.

Lending To The Street

77. For the purposes of this explanation, I shall refer to securities the subject matter of this lending activity as "stock" in order to distinguish it from security in the sense of property held as security for the repayment of a debt. I have already referred to what was or became Group policy for the hub companies to make stock earn its keep while held between acquisition and resale (whether for the hub company itself or for affiliates) by using it for the purpose of obtaining finance.

78. Just as with Rascals processes, the two main vehicles for this purpose were repos and stock loans. The essential features of a repo are that it consists of a single combined sale and repurchase contract, for the sale of specified securities settling on day one, and for the re-purchase on a fixed later date ("day two") of equivalent securities at substantially the same price, adjusted by a repo fee and/or interest charge. The sale on day one and the re-purchase on day two are generally known as the on-leg and the off-leg of the repo respectively. I shall refer to the seller under the on-leg as A and the other party to the repo as B. Although Rascals repos are invariably for one day's duration, this is not an invariable feature of a repo generally.

79. The following are standard features of repos:

i) On neither leg is the person obliged to make payment given credit. A may refuse to transfer the stock on settlement of the on-leg without simultaneous

payment by B. Similarly B may refuse to transfer equivalent stock on settlement of the off-leg without simultaneous payment by A.

ii) The on-leg requires A to transfer unencumbered title to the stock to B, and B has the same obligation on the off-leg.

iii) B's obligation is only to transfer equivalent stock. B is under no obligation to hold the stock received under the on-leg on trust for A, nor even under the obligation of a mortgagee in relation to it. B can use the stock for any purpose in connection with its business, including the settlement of a short sale to a third party.

iv) A repo leaves the market risk in the stock with A throughout. This is because the off-leg repurchase price is the same as the on-leg price, subject only to adjustment by an interest charge and/or fee. A also obtains any intermediate income on the stock between day one and day two. Although A retains no beneficial interest in the stock during that period, it may nonetheless continue to record that amount of the stock as an asset on its balance sheet, because it retains the economic risks and benefits of ownership through the performance of purely personal obligations by B.

v) For those reasons a repo is capable of being regarded in economic (but not legal) terms as a form of secured lending by B to A in the amount of the purchase price, for the period between days one and two, the security for B being constituted by receiving the stock on the on-leg while being under no obligation to transfer equivalent stock to A otherwise than against the receipt of the re-purchase price under the off-leg.

80. A stock loan has substantially the same effect as a repo, albeit by means which are at least terminologically slightly different. A transfers absolute and unencumbered title in stock to B against (i) an undertaking to transfer back equivalent stock in the future at either a fixed date or a floating date triggered by notice, and (ii) the immediate receipt of monetary collateral, which A is obliged to transfer back to B on the future date against the simultaneous receipt of equivalent stock. Where, in particular, the stock loan's off-leg is floating rather than fixed, margining provision is generally made for adjustment, upwards or downwards, in the collateral to reflect increases or falls in the value of the stock.

81. The stock loan shares all the same essential features of a repo. In particular, B is under no trust obligation in relation to the stock received under the on-leg, its obligation being a merely personal one to transfer equivalent stock to A against simultaneous return of the collateral.

82. Both under a repo and a stock loan, A is, for the whole of the period between the on-leg and the off-leg, at B's credit risk so far as concerns obtaining back stock equivalent to that transferred under the on-leg. If B has neither the necessary stock nor the means to pay for its acquisition in time for the settlement of the off-leg, A may have to whistle for the stock. Nonetheless A has the security of B's money, transferred under the on-leg. By the same token, B is equally at A's credit risk so far as concerns return of its money, since A is under no obligation to keep the money (whether purchase price under a repo or collateral under a stock loan) in a segregated

trust account. On the contrary, the commercial purpose of repos and stock loans is that A should have free use of the money, and B free use of the stock, in each case for deployment in, and the benefit of, their respective businesses. Nonetheless B has the security of having received A's stock, and cannot be compelled to transfer equivalent stock to A without simultaneous repayment.

83. As with shorts, the Group policy whereby LBIE as a hub company put securities held in its house depot accounts to work for the raising of finance by lending to the street in the form of repos and stock loans meant that, on any particular day, the amount of securities within any particular stock line held in its depot accounts could, and indeed usually would, fall well short of the aggregate amounts recorded in inter-company accounts as held by LBIE for affiliates and for itself. In fact, it became settled policy, in particular after about 1997, to keep the amount of securities lying idle in LBIE's house depot accounts as low as possible. On each trading day the account would be reviewed to identify all securities suitable for lending to the street, and such securities would be transferred from a house account to a designated stock lending sub-account, in respect of which unencumbered title would be transferred to street counterparties under repos and stock loans, in exchange for cash which, far from being credited to any account held on a fiduciary basis for affiliates, LBIE simply deployed in and about its own business, any spare cash being passed up to LBHI pursuant to group treasury arrangements.

84. An inevitable consequence of this practice was that LBIE's ability at any particular time to transfer securities held for affiliates at the affiliate's direction (whether upon re-sale to the street or for any other purpose) was critically dependent upon LBIE's own solvency, to the full extent that, at any moment in time, securities held in LBIE's house accounts had been lent to the street or used to make good short positions. As will appear, when LBIE went into administration a very substantial proportion of the securities originally settled into LBIE's house accounts on behalf of its affiliates were out on loan to the street and were, therefore, lost to the affiliates because of LBIE's inability to pay the re-purchase price under repo off-legs or to return the collateral received under stock loans. It is possible that LBIE's use of securities held for affiliates with long positions for settling its own or other affiliates' short positions contributed to this very large shortfall.

85. Another consequence of the global settlement practice is that it is at least potentially misleading to speak of LBIE acquiring, holding and then reselling stock for the account of affiliates, if that phraseology conjures up a picture of particular shares or bonds being bought, held and then resold. LBIE's own interest in a particular stock vis-à-vis its depository was not in specific securities, but rather a co-ownership right to a stated (but unappropriated) number within the whole of the depository's holding. More importantly, between the acquisition and resale of securities for a particular affiliate, LBIE's house depot account in that particular stock was likely to have a constantly fluctuating balance, depleted and refreshed on a daily basis by street lending, street borrowing, sales and purchases for LBIE itself and for other affiliates. Even ignoring the nature of LBIE's rights against its depository, it would be the merest fluke if the 100 ICI ordinary shares acquired for an affiliate on a Monday were the same as the 100 ICI ordinary shares sold for its account on the following Friday. I shall nonetheless continue to speak of LBIE's acquisition, holding and resale of securities for its affiliates, because that is the jargon of the trade, or at least of the

hearing of this application. It must however be understood subject to this health warning.

86. I have described LBIE's practice of settling short positions and of lending to the street as a general aspect of LBIE's use of securities held in its house depot accounts, without reference to any particular period or point in time and, after 1995, without reference to the question whether, in relation to affiliates' securities, it was limited to those which had been Rascalled. Mr Dicker sought to dissuade me from any over-readiness to assume that these practices were widespread before the Rascals processes were introduced, or that they were applied thereafter indiscriminately to Rascalled and non-Rascalled securities. Since the very limited evidence about these aspects of the Group's global settlements practice before 1996 consists mainly of documents generated during the Rascals project, I shall for convenience defer my findings about those matters to the next section of this judgment.

THE RASCALS PROJECT 1993-1996

87. I have already described the perceived problems arising from the adoption of the global settlement practice which led to the constitution of the Rascals project team. Its leader and the principal architect of the Rascals processes was a Mr Oliver Backhouse, who was at the time head of the Lehman European Regulatory Capital Group based in London, but who has since died. His supervisor between 1993 and 1995 was Thomas Bolland, then the Lehman European Financial Controller, and thereafter Chief Financial Officer for Europe from 1995 until 2001. Mr Bolland gave evidence and was cross-examined. The Rascals project and its implementation was only one of an increasing number of matters for which Mr Bolland was responsible at the time. Although he identified useful contemporaneous documents, his own unaided recollection of the development and implementation of Rascals was inevitably less than precise.

88. The impression given by Mr Bolland, to some extent backed up by the contemporaneous documents, was that the Rascals project, although initiated within LBIE, was perceived to address problems arising from the global settlement practice of a type likely to affect not merely LBIE but also other hub companies settling securities trades for affiliates. The evidence of Mr William Burke, employed from 1991 onwards in LBI's regulatory reporting department in the USA was, by contrast, to the effect that Rascals was very much LBIE's solution to its own problems and that, for example, LBI dealt with problems arising from the global settlement practice in a different way. Mr Burke was an occasional addressee of memoranda emanating from the Rascals project, which Mr Bolland said was discussed extensively with LBIE's affiliates.

89. It is unnecessary for me to resolve this difference of emphasis, since I am concerned only with the effect of Rascals upon LBIE's activities as hub company when settling trades in securities for affiliates. The relevance of the contemporaneous material is twofold. First, it demonstrates, at least from LBIE's perspective, the problems which the Rascals processes were designed to address and at least LBIE's purposive intention in constructing and then operating the Rascals processes. Secondly, those documents demonstrate that LBIE's thinking in this regard was sufficiently ventilated within the Group for it to be improbable that any affiliate which subsequently participated with LBIE in Rascals processing could have been unaware of LBIE's

purposive intention, or of the problems which the Rascals processes were designed to address. Thus, the purpose or intent behind the Rascals processes may properly be described as having been mutual, even if they were processes aimed at dealing with LBIE's particular problems as a hub company.

90. The following matters, relevant to the issues which I have to decide, sufficiently appear from those contemporaneous documents. First, they display a clear underlying assumption that one effect of LBIE's settling the acquisition of a security from the street for the account of one of its affiliates was to confer upon the affiliate beneficial title to the security, even though LBIE invariably settled it into one of its un-segregated house depot accounts. In cross-examination Mr Bolland confirmed that this was indeed his understanding at the time, although he recalled an opinion of some of his then colleagues that title would not pass to an affiliate in relation to a security cash-settled by LBIE with the street until the affiliate paid the purchase price to LBIE.

91. Secondly, the evidence makes it clear that a primary purpose of the Rascals processes (whether by way of daily repos or stock loans) was indeed that the affiliate should thereby confer absolute title to the underlying security upon LBIE, to the exclusion of any continuing beneficial interest of the affiliate. Without doing so, the perception was that none of the problems thrown up by the global settlement practice would be satisfactorily addressed. Without full title to the underlying securities, LBIE would have no effective security as against its affiliate to remedy the capital charge problem. For as long as the affiliate remained the beneficial owner of the security, the segregation problem would not be addressed. Equally, the financing problem was perceived to require LBIE actually to have absolute title to the security in order to be able to lend it to the street, not least since the standard terms of repos and stock loans required the transfer of absolute title to the street counterparty, against cash plus a merely personal obligation to transfer back equivalent securities.

92. In fact, as is hinted at by the contemporaneous documents, none of those problems were necessarily immediate in 1993, when the Rascals project was established, or insoluble otherwise than by a transfer of absolute title. The capital charge problem was, prior to the coming into force of the EU Capital Adequacy Directive at the beginning of 1996, capable of being addressed by reference to an exception in favour of unsecured loans between affiliates. A requirement to segregate securities held for the account of third parties was subject to an exception for regulated affiliates until after 2005. The financing problem had not proved insoluble from the adoption of the global settlement practice in 1993, even though LBIE had regularly lent to the street securities acquired for the account of affiliates prior to the introduction of the Rascals processes. This worked in practice, since stock borrowers in the street customarily took title to securities from LBIE under repos and stock loans for value and without notice of the affiliates' beneficial interests.

93. Mr Bolland was pressed in cross-examination by Mr Moss with the suggestion that, in any event, the off-leg of the daily repos which eventually became the principal mechanism under Automatic Rascals necessarily involved a transfer of beneficial title back to the affiliate at the beginning of every day, where it rested until the coming into effect of the next on-leg later on the same day. Mr Bolland's response was that it had been his understanding that the purpose and effect of the daily repos was to confer continuous rather than intermittent beneficial title on LBIE, and in this he was corroborated by a memo of Mr Backhouse created in 1997 to the effect that "I have

always taken the view that the RASCALS repo lasts 23 hrs 59 mins & 59.999 secs and that if a dividend arises that happens in the 0.001 sec the stock is back in 'custody'." Whether the process of daily repos had that effect as a matter of law is something to which I shall return but, to the extent that the answer depends upon the parties' mutual intention, I accept Mr Bolland's evidence that the objective behind Rascals was to bring about a continuous beneficial interest of LBIE in the underlying security, to the exclusion of the affiliate, for as long as the security was the subject matter of a Rascals process, whether by a stream of daily repos or by an open-ended stock loan.

94. Thirdly, it is evident that, as a matter of purpose and intent, the Rascals processes were conceived of as effecting a transfer of beneficial title from the affiliate to LBIE despite payment for the first repo (or collateral for the stock loan) not being effected by cash settlement as between LBIE and the affiliate. Payment was to be effected by book entries, coupled with offset against the affiliate's unsecured debt to LBIE for the original acquisition price of the security from the street. That this was to be the method of payment is spelled out in the contemporaneous documents. It is not, as some of the respondents suggested, simply an after-the-event interpretation of the Rascals structure dreamed up by the Administrators and their legal team.

95. Finally, the contemporaneous material provides no guidance as to subjective intent in relation to beneficial ownership in the event that the Rascals process should be terminated, not by the eventual resale of the security to the street, but by events triggered by the insolvency of one or both of the parties to the Rascals transactions. This is hardly surprising, since the Rascals processes were devised in order to meet regulatory and other problems associated with the active carrying on of LBIE's business, rather than in the context of an apprehension that the Group might collapse. Nonetheless it is inherent in the capital charge problem, and in the solution that LBIE should become in effect a secured creditor of the affiliate, that a purpose of the Rascals process was to confer security upon LBIE in the form of beneficial title to the underlying stock in the event of the affiliate's insolvency.

96. The contemporaneous documents also shed light on the question raised by Mr Dicker as to the extent to which LBIE's use of affiliates' securities held in its house depot accounts for settling short positions and for lending to the street was widespread before 1996. In a paper headed "Rascals Project" in March 1995, Mr Brian Nicholson, a member of the Rascals Project team wrote this, under the heading "Title":

> "As well as not segregating the stock belonging to other group companies, the stock is often used to secure financing, e.g. a trader in LBI takes a position in a Bund, the trade clearing through LBIE's Euroclear account. Since Bunds are a European product, they would normally be funded by the London repo desk. The repo desk will repo the bond out and pass the benefit back to the LBI traders book. The repo is booked out of LBIE, not LBI (the repo trader sees only the bonds sitting at Euroclear, he has no indication of ownership). Clearly, LBIE has no title to the bonds and should not do the repo."

97. In an email dated 21st April 1995, in relation to the same issue, Mr Backhouse said this:

> "The problem is that the settling company ends up with a big debt from the trading company and with the trading company's securities in its depot which it then uses (e.g. for its own funding needs via repo) as if they belong to it."

98. Those two extracts, taken together, suggest that the raising of finance by lending securities to the street was a general feature of LBIE's dealings with securities held in its un-segregated depot accounts, including securities held for affiliates, before the implementation of Rascals. In his examination in chief Mr Bolland confirmed that this was the practice before Rascals was implemented, and that it was well known to LBIE's affiliates, being part of the way in which the Group operated, rather than a practice peculiar to LBIE. He recalled that this practice was discussed with representatives of LBIE's affiliates during the Rascals Project in which he participated.

99. The two extracts quoted above do not (at least at first sight) speak with one voice as to the question whether LBIE used the funding obtained by lending securities on its house depot accounts to the street specifically for funding the acquisition of securities for the affiliates whose securities were used in that way, or simply for the purposes of its own business, including the raising of funding for the acquisition of securities generally. The first extract suggests the former whereas the second suggests the latter. Evidence from Mrs Greenway (in her sixth witness statement and in cross-examination) suggested that the reference in the first extract to the benefit being passed "back to the LBI Traders Book" did not mean that LBIE accounted for the benefit of any street funding to the affiliate whose securities had been lent to the street, but rather that LBIE's traders were expected as far as possible to fund the cost of the acquisition of securities generally from the proceeds of street lending. As already described, LBIE rather than the affiliates bore the cash-flow burden of the acquisition of securities settled into a LBIE depot. Prior to the implementation of Rascals, LBIE merely had an unsecured receivable from the affiliate for which the securities were acquired.

100. In my judgment the reference to passing the benefit back to the LBI Traders Book in the first quoted extract does not displace the clear impression given by the evidence as a whole that, both before and after the implementation of Rascals, the financing benefit obtained by LBIE from lending securities in its un-segregated depot accounts to the street was applied generally by LBIE to fund its activities, including but not limited to funding the settlement of its affiliates' acquisitions, and that at no time did LBIE account on a specific basis to the affiliate whose securities were lent to the street, or recognise any obligation to do so.

101. The quoted passage from Mr Nicholson's note is relevant also to the question whether, after the introduction of Rascals, LBIE confined its street lending of affiliates' securities to those which had been Rascalled. The passage "the repo trader sees only the bonds sitting at Euroclear; he has no indication of ownership" suggests that, at least in 1995, it would have been impossible for any of LBIE's repo traders (i.e. those conducting the street lending) to have known whether any particular

security was held either for LBIE, or for the book of any particular affiliate. Evidence relating to the period after 1995 suggests otherwise.

102. It is clear from the evidence that, by the time of the Group's collapse, a very large part of the affiliates' securities which had been Rascalled were out on loan to the street. That is the primary reason why LBIE's depots contain only a minority of the securities by then acquired for affiliates' books and not resold outright to the street. Nonetheless, since the present application has only been concerned with Rascalled securities, the evidence does not permit any findings as to the extent to which non-Rascalled securities were, after 1995, habitually (rather than merely accidentally) lent by LBIE to the street.

103. I consider that the evidence shows with reasonable clarity that the basis upon which Rascals was implemented was that it would be extended, automatically or manually, to all those securities at all likely to be suitable for lending to the street so that, whether or not a repo trader could actually check on his own computer screen whether a security which he wished to lend to the street had been Rascalled, he could proceed on the working assumption that, if it was held for the book of an affiliate rather than for LBIE itself, it had been.

<u>IMPLEMENTATION OF RASCALS</u>

104. Implementation of Rascals manifested itself in two distinct forms. The first consisted of a series of written master agreements entered into between LBIE and each of its relevant affiliates, designed to provide a structure (uniform for each affiliate, but not always across the Group) for the subsequent entry into repo and stock lending contracts. The second consisted of the making of the repos and stock loans thereafter, now evidenced by the Group's electronic books and records, and reflected in each relevant entity's accounts and financial statements.

<u>THE INTER-COMPANY AGREEMENTS</u>

105. The analysis of the implementation of the Rascals processes is greatly complicated by the need to address the terms and subsequent implementation of the master agreements in the context of other agreements made between LBIE and the relevant affiliates, including financing agreements, custody agreements, brokerage agreements and agency agreements. Most of them appeared to have been in, or modelled on, forms in standard use within the Group from time to time.

106. None of these agreements were negotiated at arm's length between their various parties, all of which were wholly owned subsidiaries of sub-subsidiaries of LBHI. Far from being the product of any bargaining process, they appear to have been put in place mainly as a convenient means of recording in contractual form the basis upon which, from time to time, inter-company transactions and arrangements were being conducted, and for purposes having more to do with being able to demonstrate fact-patterns about inter-company dealings relevant to regulators, auditors and fiscal authorities, rather than to serve as binding and rigidly enforceable contracts between the entities concerned.

107. I do not mean by that description that these agreements are to be regarded as shams. Nonetheless the absence of arm's length bargaining, and of any conflict of

commercial interests calling for their rigorous scrutiny or enforcement, coupled with serious and sometimes insoluble divergences between the terms of the agreements and the inter-company dealings revealed by the Group's book-keeping, means that this patchwork of agreements between LBIE and the relevant affiliates forms a by no means wholly reliable guide as to the basis upon which the Rascals transactions were conducted and, in particular, paid for.

108. Furthermore, the absence of arm's length bargaining, coupled with the use, for convenience, of internal standard forms within the Group means that it is often difficult to ascertain precisely in relation to any particular agreement to what business between its parties it was intended to apply, or to which it was, thereafter, actually applied. Some of the agreements are, to a modern eye, in extraordinarily short and generalised form. While that has mercifully eased the task of their assimilation, it has led to real difficulties of interpretation, either separately, or as part of the wider patchwork of agreements in force between the relevant parties from time to time.

109. A further general complicating factor is that whereas the agreements apparently regulating the dealings between LBIE and the affiliates appear to have been made on a wide range of dates between 1996 and 2003, the accounting records evidencing specific Rascals transactions (and in particular the Automatic Rascals process) which have been focused on for the purposes of analysis mainly concern the period after 2005, during which the overwhelming majority of the relevant surviving securities were acquired from the street. The evidence did not show whether those responsible during that period for processing the relevant transactions were concerned to comply with, or were even cognizant of, the terms of the relevant agreements, all of which were by then several years old, leaving open a real possibility that even if the agreements constituted an accurate reflection of the basis of inter-company dealings to which they related at the time when they were made, inter-company practices thereafter diverged from that pattern without anyone taking the trouble to amend the framework of agreements accordingly.

110. The result of these general features of the parties' mutual dealings is that, as Mr Milligan put it in opening, the court is being invited on this application "to make the best sense of what is in some respects a mess".

111. There is, unfortunately, no escape from a separate review of the apparent contractual relationship between LBIE and each of the respondent affiliates, save only that for this and most other purposes, LBCCA and LBAH can be taken together.

112. Save where I state otherwise, the agreements were all governed by English law. Even where they were not, in respect of all but one of them, the parties have invited me to assume that the application of a foreign law interpretation would produce the same result as under English law. The exception is an agreement between LBIE and LBI, governed by New York law, about the interpretation of which substantial expert evidence has been deployed but, happily, cross-examination avoided.

LBF

113. Reliance was placed by LBIE and/or LBF on the following types of agreement between them: an Inter-Company Repurchase Agreement ("ICRA"), a Master Custody Agreement ("MCA"), an Inter-Company Funding Agreement ("ICFA") an

Agency Agreement and a Brokerage Agreement, together with a supplement. I shall describe the relevant provisions of each, in turn.

114. The ICRA, dated 15th March 1996 and made between LBIE and LBF was clearly the result of the Rascals project, and was specifically concerned with regulating the routine making of repos and stock loans between its parties. It includes the following recitals:

> "WHEREAS each Party may settle securities transactions at the request of the other Party and, as a consequence of these transactions, may hold securities on behalf of the other Party;
>
> WHEREAS all parties wish to ensure that security and monetary balances arising between them from such settlement are properly secured;
>
> WHEREAS the parties are or may become subject to capital adequacy and other regulations under the various jurisdictions in which they operate;
>
> WHEREAS the parties wish to ensure both that there can be no doubt about adherence to regulations relating to the custody of assets and that there is no doubt about their treatment for regulatory capital purposes of the inter-company balances arising from these settlements;
>
> WHEREAS the parties consider that the most appropriate way in which to resolve this is to enter into repurchase, sell/buy-back or stock loan transactions in respect of securities held by one party but owned by another."

115. Clause 1 made general provision for the parties to enter into repos and stock loans between each other. In the case of repos, the current version of the industry standard PSA/ISMA in force from time to time was to apply. In relation to stock loans the current version of the industry standard Overseas Securities Loan Agreement ("OSLA") was to apply.

116. Clause 1 then continued:

> "Where a Party is holding securities (the "Holding Party") on behalf of the other Party (the "Owning Party"), the Holding Party may, in its discretion and by notice to the Owning Party buy or borrow the Securities, in which case the Owning Party shall pass full legal and beneficial ownership in the securities to the Holding Party against receipt by the Owning Party of purchase monies (in the case of repurchase or sell/buy-back transactions) or collateral (in the case of stock loan transactions). Both Holding Party and Owning Party agree that the Owning Party shall be obligated to repurchase or accept return of the Equivalent Securities, at a price to be agreed by the Holding Party and the Owning Party…."

117. Clause 1 concluded with notice provisions whereby either side could call back or put back the equivalent securities at any time, and conferred on the Holding Party the right to sell the securities upon default by the Owning Party in repurchasing or accepting return.

118. Clause 2(a) enabled transactions to be entered into orally or in writing at the initiation of either party, and then provided for evidence of transactions in the form of Confirmations, a process which research post-collapse suggests was routinely ignored, reliance being placed instead on deal and trade tickets together with book entries, all in the ITS system. Clause 2 concluded as follows:

> "In the event of a default in relation to more than one transaction a net aggregate sum of the amounts owed by one party to the other under this agreement shall become due and payable."

119. Clause 3 made provision for daily marking to market of both securities and collateral, with consequential margin obligations. Since, under Automatic Rascals, the daily repos were each transacted at the marked to market price of the underlying security on that day, margining was unnecessary. Margining was necessary in relation to Manual Rascals.

120. Clause 4 provided that, wherever a security generated intermediate income (by coupon or dividend or otherwise) while the subject of a repo or stock loan, that income would be paid or credited by the Holding Party to the Owning Party.

121. Clause 5, headed Netting, provided as follows:

> "All parties hereto agree on an ongoing basis that all obligations of the Owning Party to Holding Party and vice versa shall be calculated on a net aggregate basis. It is agreed that all securities and cash owed by Holding Party to Owning Party shall be set off against the obligations of Owning Party to Holding Party. For the purposes of calculating the net aggregate exposure pursuant to this section the value of any securities purchased, lent or provided as collateral shall be the value determined by the Lehman Brothers ITS system. The claims of the Owning Party to the Securities is to be set off against the claim of the Holding Party to the payment of money for the Securities."

122. Clause 8 provided for the agreement to remain in force until terminated by seven days written notice from either side.

123. The incorporation by reference in clause 1 of the ICRA of the industry standard repo and stock loan forms of agreement (namely the PSA/ISMA and OSLA) meant that, in relation to the detailed terms of any particular repo or stock loan, the master agreement was automatically updated in line with changes in the industry standard. Nothing turns on those standard terms.

124. LBIE and LBF made an Agency Agreement on 29th November 1996. It was replaced by a Brokerage Agreement dated 27th March 1998, which was in turn amended by a Supplement dated 23rd October 2000. The importance of these agreements is not their operative terms, which simply regulated the remuneration payable by LBF to LBIE for services therein specified, but rather in their recitals. Recitals (c) and (d) to the Agency Agreement were as follows:

> "(c) The Company, as agent for LBF, negotiates the terms of individually tailored derivative product transactions entered into by LBF and in connection therewith markets and sells such derivative products, as well as executes for LBF transactions intended to hedge related balance sheet exposures.
>
> (d) The Parties intend to organise their financial relationship relating to the Company's agency activities for LBF's derivatives business."

Recitals (c) and (d) to the Brokerage Agreement which (by clause 7) superseded the Agency Agreement were as follows:

> "(c) The Company is responsible for designing, marketing and selling derivative products as agent for LBF, as well as for hedging related balance sheet exposures.
>
> (d) The Parties intend to organise their financial relationship and in particular the compensation of the Company's activities such as described above."

125. Clause 1 of the Brokerage Agreement (which was governed by Swiss law) provided for brokerage commission at a stated rate to be payable "for each transaction entered into by the Company (*i.e. LBIE*) as agent for LBF". The Supplement merely altered the rate of remuneration, so as to bring it into conformity with the OECD Transfer Pricing Guidelines for Multi-Nationals and Tax Administrations.

126. Mr Moss placed reliance on the Agency and Brokerage agreements as determinative of the relationship between LBIE and LBF in connection with LBIE's settlement of securities for LBF's account. Mr Antony Rush, a Managing Director and head of the LBIE Administration Tax Team, gave evidence that these agreements (in particular the Brokerage Agreement and its Supplement) were an unreliable guide to the legal nature (as broker, agent or otherwise) of LBIE's securities settlement service for LBF's account, being concerned merely to ensure conformity in terms of inter-company remuneration with the transfer pricing guidelines in force from time to time. He nonetheless confirmed that brokerage was routinely paid by LBF to LBIE in relation to LBIE's purchases of securities from the street for LBF's account, at least until 2001, in answer to a question from the court during cross-examination. He declined Mr Moss's invitation to treat his evidence in chief, that those agreements "were not intended to define the nature of the legal relationship between LBIE and LBF or the capacity in which LBIE was acting described therein" as meaning that those agreements were shams.

127. In my judgment the fact that brokerage under these agreements was in fact paid by LBF to LBIE in connection with LBIE's settlement of securities for LBF's account demonstrates that both parties assumed when those agreements were made that LBIE provided those services to LBF as an agent or broker.

128. Considerable reliance was placed by Mr Moss on the terms of a Master Custody Agreement made between LBIE and LBF on 22nd August 2003. It is in standard Lehman Group form, and evidently designed, at least primarily, for use between a Lehman company and an external client, for the purpose of regulating the terms upon which the Lehman company was to hold securities, precious metals or other forms of property as custodian for the client in custody accounts.

129. The MCA described LBIE as the Custodian and LBF as the Client. Its terms are, *prima facie*, wholly incompatible with the global settlement practice, pursuant to which, far from keeping LBF's securities in a separate custody account, subject only to pooling with the securities of other clients, as required by the MCA, the settled practice was for all securities held for the account of an affiliate to be aggregated with LBIE's own securities in a house depot account, and used for financing purposes by LBIE for its own account.

130. It seemed to me, initially, that the reconciliation of this incompatibility might lie in the fact that, without depots of its own, LBF might need from time to time to arrange for LBIE to hold LBF's own clients' securities on a custodial basis. Mr Moss submitted, in opening, that this could not be so, since LBF had no external clients. It emerged in evidence however that external counterparties in derivatives transactions with LBF would commonly lodge non-monetary collateral or margin with LBF in the form of securities which, lacking its own depots, LBF did indeed then arrange for LBIE to hold. The evidence was ambivalent as to whether in those circumstances LBIE invariably ensured that such securities were held in custody accounts, but it seems to me probable that it was in connection with the holding of such securities, deposited by LBF's counterparties as collateral or margin, that it was considered appropriate for LBIE to enter into an MCA with LBF. The MCA had in my judgment nothing whatsoever to do with securities acquired by LBIE for LBF's account in connection with LBF's hedging strategies.

131. I must finally describe the Inter-Company Funding Agreement ("ICFA") made between LBF, LBIE and LBHI on 5th June 2000. Its recitals were as follows:

> "WHEREAS LBF is a Swiss Limited company trading in equity and other derivatives and investing in securities to hedge exposures arising from derivative transactions.
>
> WHEREAS LBIE is a member of the Securities and Futures Authority and is authorized to carry on investment business in the United Kingdom under the Financial Services Act 1986.
>
> WHEREAS LBIE acts as settlement agent for LBF in certain of the derivatives and securities transactions noted above.
>
> WHEREAS LBHI can provide treasury services to any Lehman Brothers group company."

132. Under the heading Funding and Settlement, clause 1 was as follows:

> "1. Funding and Settlement
>
> LBIE agrees to settle such securities transactions as LBF requests it to: and LBHI agrees to provide funding to LBF to permit LBF to provide funds to LBIE to effect settlement transactions on behalf of LBF. LBIE will hold funds provided by LBF on deposit for LBF as requested by LBF from time to time.
>
> For the avoidance of doubt, any loans under this agreement are provided directly from LBHI to LBF and at no time will LBIE be regarded as lending to LBF."

The agreement was by clause 6 to remain in full force until terminated by any party giving written notice to the others. No such notice of termination appears ever to have been given. Nor does it appear thereafter to have been amended in writing as prescribed by clause 7.

133. The ICFA formed the bedrock of LBF's case as to the ineffectiveness of the Rascals processes for the purposes of transferring beneficial ownership in the underlying securities. As will appear, similar cases were advanced both by LBSF and, in a more complicated form, by LBCCA/LBAH. I will defer addressing the issues as to the interpretation and implementation of the IFCA to a later stage in this judgment. Regardless of the effect of clause 1, its recitals plainly identify LBIE as settlement agent for LBF in at least some of LBF's security investments for hedging purposes. To that extent it is supportive of Mr Moss's submissions based upon the Agency and Brokerage agreements.

LBCCA/LBAH

134. The relationship of these respondents with LBIE gives rise to the most complicated contractual analysis. It will be recalled that LBCCA was a Hong Kong securities trader which used LBIE for the settlement of European securities. LBAH was, so far as is relevant for present purposes, a funding company, interposed in the funding arrangements between LBHI and Group entities in the Asia/Pacific region including LBCCA.

135. The Rascals project was intended to be implemented in relation to securities acquired by LBIE for the account of LBCCA by the combined effect of two agreements, both made on 28th November 1997, entitled respectively the Multi-Party Repurchase Agreement ("MPRA") and the Inter-Company Novation and Netting Agreement ("the NNA"). On its face, the NNA appears to have had a substantially wider purpose and effect than merely the implementation of Rascals, and it is convenient to describe it first.

136. The NNA was made between LBAH, LBIE and seven other Lehman entities in the Far East, one of which was LBCCA. Its recitals are as follows:

> "WHEREAS:

(1) each of the Parties is an Affiliate of Lehman Brothers Holdings Inc; and

(2) the Parties wish to enter into this Agreement in order to achieve the netting of all payment and delivery obligations under certain inter-group company payables, receivables and deliverables so as to reduce inter-company exposures; and

(3) the Parties have agreed that rights and obligations under certain inter-company cash payables, receivables and deliverables will be transferred to and assumed by LBAH and netting arrangements are to be put in place on the terms set out below;"

137. Clause 1 contained a number of definitions including the following:

> "Balance Ledger" means the ledger of certain balances and debts owing between two Parties and prepared and maintained by LBAH for the purposes, inter alia, of this Agreement;
>
> "Inter-Company Balance" means (subject always to clause 4 (Cessation)) a balance, debt or deliverable owed between two Parties and as, or to be, recorded or shown in the Balance Ledger from time to time, but not including, (i) Excluded Balances; (ii) Novated Balances; and (iii) Unnovated Balances (unless otherwise agreed between the Parties to the relevant balance and LBAH);
>
> "Excluded Balance" means a balance debt or deliverable as recorded or shown from time to time in the Balance Ledger of a type as set out in, and between those parties referred to, in Schedule 1 hereto;
>
> "Novated Balance" bears the meaning set out in Clause 6;
>
> "Unnovated Balance" means (subject always to Clause 4 (Cessation)) a balance or deliverable owed between LBAH and a Party and as recorded or shown in the Balance Ledger from time to time, but not including (i) excluded balances; and (ii) novated balances, unless otherwise agreed between LBAH and such Party.
>
> "Balances" means Inter-Company Balances, Novated Balances and Unnovated Balances;"

138. Clause 3 made provision for additional parties to be added to the agreement. With effect from 5th June 2000 LBHI (or, literally, its London branch) was added as a party. Clause 4 made provision for cessation of the arrangements contemplated by the NNA in relation to particular balances, by the issue of a Cessation Notice by LBAH, but the evidence does not suggest that any Cessation Notices have ever been served.

139. For present purposes the important provisions of the NNA are to be found in clauses 6 and 7, headed respectively Novation and Netting. Clause 6 is worth quoting in full:

> "6.1 Novation Time
>
> An Inter-Company Balance shall be deemed to be novated in accordance with Clause 6.2 as of the time immediately after that Inter-Company Balance becomes due and payable, notwithstanding that it may not be shown or recorded in the Balance Ledger at that time.
>
> 6.2 Novation
>
> (a) Upon the occurrence of an Inter-Company Balance arising between the Parties hereto the relevant Inter-Company Balances shall be novated, whereby the outstanding rights and obligations under such Inter-Company Balances shall be cancelled and terminated and there shall be deemed to arise two separate debts:
>
> (i) one of them subsisting between (x) the creditor Party ("the Creditor Party"); and (y) LBAH in lieu of the debtor Party ("the Debtor Party");
>
> and
>
> (ii) the other of them subsisting between (x) the Debtor Party; and (y) LBAH in lieu of the Creditor Party;
>
> Each of these two separate debts (each a "Novated Balance") being on the same terms mutatis mutandis as the relevant Inter-Company Balance.
>
> The obligations and rights of the Parties to the Novated Balances shall entirely supersede and replace the obligations and rights of the parties to the relevant Inter-Company Balance."

140. Clause 7.1, headed Settlement Netting provides as follows:

> "7.1 If, with respect to two Parties on any Business Day more than one payment is payable or more than one security is deliverable under two or more Balances owed between such Parties then the amounts of such payments or deliverables shall be aggregated and only the difference between the aggregate amounts shall be payable or deliverable, by the Party owing the larger sum or amount deliverable to the other Party, and, if the aggregate amounts are equal, no payment of the relevant amounts or delivery of the relevant securities shall be made."

141. Clause 7.2 makes similar provision under the heading Novation Netting, in relation to Novated Balances (as explained in clause 6.2), as is made in relation to Balances prior to novation in clause 7.1.

142. Clause 7.3(a) brings the operation of settlement and novation netting to an end upon the happening of an Early Termination Date (which is triggered, *inter alia*, by an insolvency event affecting a party), and it is replaced by close-out netting under clause 7.4. Clause 7.3(b) provides that settlement and novation netting should apply notwithstanding that LBAH and/or any Party may fail to record the new obligations referred to in those clauses in its books or records.

143. Clause 8 obliges all parties to any Inter-Company Balance to enter into Novated Balances in accordance with the terms of the agreement. By clause 15, the agreement is governed by Hong Kong law.

144. The provisions as to novation and netting in the NNA are reasonably comprehensible in the context of Balances consisting of inter-company debts. Thus for example a debt owed by LBCCA to LBIE in connection with LBIE's cash settlement of a security acquired for LBCCA's account would, from the moment it became due and payable (see clause 6.2) be replaced by equivalent debts owed by LBCCA to LBAH and by LBAH to LBIE, subject to any settlement netting applicable to that debt prior to novation because of any debt due at the same time by LBIE to LBCCA. Equally, the novated balance due from LBAH to LBIE would itself be subject to novation netting by reference to any other novated balances owed either way, as between LBIE and LBAH.

145. By contract, the effect of the NNA in relation to balances consisting of what are described (without any further definition) as "deliverables" is extraordinarily opaque. It is tolerably clear from the phrase "more than one security is deliverable" in clause 7.1 that a deliverable is some form of obligation in relation to a security and probably, since otherwise it would simply be a debt, a non-monetary obligation. For present purposes, the critical question is whether and if so how the provisions of the NNA as to deliverables apply to the relationship of trustee and beneficiary (rather than debtor and creditor) which the respondents allege arose between LBIE and an affiliate by reason of LBIE's settlement of the acquisition of a security for the affiliate's account. Critically, is the effect of the NNA to substitute LBAH as LBIE's beneficiary under that trust and if so, what is the relationship then created by clause 6.2 between LBAH and LBCCA in connection with the same security?

146. No surviving document or evidence suggests that anyone within the Group gave this conundrum any rational thought. Nonetheless it is clear from the terms of the MPRA, made on the same date as the NNA, that the assumption of the draftsman at least was that LBAH did become LBIE's beneficiary. This is because the MPRA, which was the primary vehicle for the application of Rascals processes to securities acquired by LBIE for LBCCA's account, was made not between LBIE and LBCCA, but between LBIE and LBAH. Save for the slight difference in its title, it is otherwise, and for all practical purposes, in the same terms as the ICRA between LBIE and LBF, which I have already described.

147. Another baffling aspect of the NNA concerns the effect of the addition of LBHI as a party in June 2000. Literally, it would appear to have the effect that any inter-company debts or deliverables arising even between LBIE and LBHI would be subject to novation, so as to interpose LBAH, regardless whether the debt or deliverable had anything to do with the affairs of the Group in the Far East. Plainly the inclusion of LBHI was intended to have some more limited purpose, but the nature of that purpose, or of the relevant limitations, is almost unfathomable.

148. A Master Custody Agreement ("MCA") was also entered into between LBCCA and LBIE on 17th November 2000. For the reasons which I have already given in relation to the agreement in similar form between LBIE and LBF, I consider that it has no relevance or application to Rascalled securities. Its reasonably obvious purpose was to regulate LBIE's custody of European securities deposited with LBCCA by its clients, for which LBCCA had no suitable depot of its own.

LBI

149. The relevant contractual structure as between LBIE and LBI consisted of four agreements, the first of which in time was an Undisclosed Clearing Custody and Brokerage Services Agreement ("UCCBSA") dated 15th November 1996, which replaced an earlier agreement of the same type dated 13th July 1994. Both agreements contained the following provisions:

> "Relationship of LBIE and LBI. It is understood and agreed that LBIE is acting as a clearing broker for LBI, and not for any customer of LBI or for any other person, in respect of transactions performed hereunder…" (Clause 3.2)
>
> "Except as otherwise provided in this Agreement, LBIE shall be responsible for the safekeeping as custodian for LBI of all money and securities received by it pursuant to this Agreement." (Clause 8.1)
>
> "In the event that LBIE effects a short sale in a given security, and it is holding in custody for any customer of LBI a long position in the same security, LBIE shall ensure that such long position shall remain segregated for the benefit of such customer and shall not be offset against LBIE's short position" (Clause 8.5 (1994 version) Clause 8.8 (1996 version))

150. Apart from the specific provision about long positions of LBI's customers, neither agreement contained any general requirement for LBIE to segregate LBI's securities and money while held in safekeeping as custodian.

151. There is a sharp dispute as to the interpretation of the UCCBSA, backed up by competing expert evidence as to the applicable principles of New York law, to which I shall have briefly to return. For present purposes it is sufficient for me to note that the agreement made in 1996 (at about the time of the conclusion of the Rascals project) contained the following three provisions which were absent from the July 1994 agreement:

> "8.4 LBIE may use its own funds to settle any non custody customer and proprietary transaction on behalf of LBI. To the extent that LBIE does so then LBIE shall be deemed to have stepped in as principal at point of settlement and, until such time as LBI shall pay LBIE, LBIE shall have the unfettered right to use the securities it has paid for as it sees fit. LBIE shall maintain a separate account of these transactions ('the related loan account').
>
> 8.5 The securities held by LBIE relating to transactions arising under paragraph 8.4 above shall be marked to market at close of business each day and the difference between their total value and the balance on the related loan account shall be settled on demand and the balance on the related loan account adjusted to the extent such settlement occurs.
>
> 8.6 In the event of a default by LBI then LBIE shall have the right to realise all securities it holds relating to the transactions arising under paragraph 8.4 and to apply the proceeds to reduce or extinguish the balance on the related loan account. In such event only the net remaining balance on the related loan account shall be accountable between the parties."

152. LBIE and LBI made a Global Master Repurchase Agreement on 1st November 1996, replacing an earlier agreement of the same type dated 14th February 1996. Since it does not appear that any surviving security held in LBIE's depots for LBI was the subject of a repo, I need say no more about it.

153. LBIE and LBI also made an Overseas Securities Lender Agreement ("OSLA") on 27th February 1997. There is no issue as to its interpretation or effect. It regulated stock lending between the two companies on terms which (*inter alia*) made the obtaining of beneficial title to equivalent securities by the stock lender at the end of a stock loan conditional on repayment of the collateral.

154. It is likely that there existed a Master Custody Agreement between LBIE and LBI since, although it cannot be found, there are references to it in schedules dated respectively 20th June 2000 and 9th January 2002 from which its existence, probably on standard Group MCA terms, can readily be inferred. Again, I consider it to have no more relevance to the issues arising from Rascals than any of the MCAs to which I have already referred.

<u>LBSF</u>

155. There existed a suite of agreements between LBIE and LBSF broadly similar to those which I have already described as between LBIE and LBF. They included a Multi Party Repurchase Agreement ("MPRA") dated 15th November 1996 to which LBIE and LBSF were two of the five parties. Its terms differed in no significant respect from the ICRA between LBIE and LBF. There was also an MCA, although (as with LBI) a copy has not survived. I infer that it was on the same terms as those which I have already described, and equally irrelevant for the same reasons as concern LBF.

156. LBSF, LBIE and LBHI made an inter-company funding agreement ("ICFA") on 2nd February 2001. Again, it is in identical terms to that made between LBIE and LBF. Nonetheless, Mr Jones QC for LBSF placed reliance for the purposes of interpreting the ICFA between LBIE and LBSF upon two earlier funding agreements, the first of which was a Non-Discretionary Agency Agreement made between LBSF, LBIE and Lehman Brothers Holdings plc ("LBH plc") in January 1994. While broadly in the same terms as the 2001 ICFA it contained the following additional material. First, there was an additional final recital in the following terms:

> "WHEREAS plc wishes LBIE to act as its agent in making advances to LBSF in regard to those same securities transactions."

In clause 1 the second sentence reads as follows:

> "Notwithstanding that the accounting records of the parties to this agreement may show PLC lending to LBIE which then lends to LBSF IT IS HEREBY AGREED that any loans under this agreement are provided directly from plc to LBSF and that at no time will LBIE be regarded as lending to LBSF."

157. The second predecessor to the 2001 ICFA was dated 5th June 2000 and also entitled a Non-Discretionary Agency Agreement. By contrast with the 2001 ICFA it contained the same additional recital as I have quoted from the 1994 agreement, but its clause 1 was in the same terms as the 2001 agreement.

158. Finally, LBIE and LBSF entered into a pair of successive Discretionary Agency Agreements dated respectively 27th March 1995 and 16th August 2002. It took from 1995 until October 2000 before LBSF got round to signing the earlier agreement. It is sufficient to quote briefly from the second of those agreements. It included the following recitals:

> "WHEREAS LBSF enters into transactions in interest rate swaps, currency swaps, interest rate caps, equity swaps, equity options, equity securities and other related transactions intended to hedge interest rate, equity and currency risk and providing capital markets advice and services (the "Transactions").
>
> WHEREAS LSBF wishes LBIE to use its best efforts to find customers willing to enter into with, and effect Transactions through LBSF as agreed from time to time. "

Clause 1 headed Services was as follows:

> "Subject to the terms and conditions of this Agreement, LBIE agrees to act as an introducing agent to LBSF for the purposes of the Transactions. All documentation relating to the Transactions will be arranged by LBIE as introducing agent for and on behalf of LBSF, subject to LBSF's confirmation."

By clause 6 the agreement was stated to remain in full force and effect until terminated by seven days written notice. There is no evidence that it was terminated before the collapse. Conversely there is no evidence that any payments were ever made under it to LBIE. Payments were made to LBIE under the earlier agreement until about 2001, after which they were made by LBSF to LBEL pursuant to a similar form of agreement between those parties.

IMPLEMENTATION – THE BOOK ENTRIES

159. This is, potentially at least, an enormous subject, and the interpretation of the book entries lies at or close to the heart of a number of the issues which I have to decide. Nonetheless, at least by the end of the hearing, the scope of factual dispute about the entries themselves, as opposed to their interpretation, had become very limited, albeit that serious limitations on the extent of the respondents' access to the Group's electronic book-keeping systems after the collapse means that there are areas of incomplete research where it is necessary to draw inferences based on probabilities, and some areas where the available material precludes any safe conclusions at all.

160. The account which follows is therefore very much a brief summary of an enormous mass of primary material. In describing what the book entries show I have avoided as far as possible the use of the words debit and credit because of the differences in the ways in which those words are used, both as between lawyers and accountants, and by different accounting conventions. Generally, where I describe the book entries as showing payables and receivables between Group entities, it may be assumed that the books of both the creditor and the debtor show substantially the same position. This is because, for present purposes, most of the relevant entries in the books and records of the relevant entities within the Group are derived, directly or indirectly, from the ITS system in common use by all of them, and their consequences passed automatically to the individual entities' separate books via DBS.

161. Although many of the book entries generated by the Rascals processes take a common form as between LBIE and each of the respondent affiliates, there are nonetheless important differences which make it impossible to provide a general description applicable to all of them. I shall therefore begin with describing the book entries reflecting the implementation of Rascals as between LBIE and LBF. Thereafter I shall focus in relation to the other respondents upon the departures from the LBIE/LBF model thus described.

LBF

Acquisition From The Street

The Trade Date

162. Whenever LBIE acquired a security from the street for the account of LBF, two trade tickets were generated by ITS on the trade date (that is, in legal parlance, the date of the contract). The first was a trade ticket recording the essential terms of LBIE's contract with the street counterparty (invariably described in the ticket as the "client"). The second ticket recorded a back to back sale of the same amount of the same security by LBIE to LBF with the same settlement date and the same price.

Each ticket would then lead to the automatic generation by ITS of consequential entries in LBIE's and LBF's books.

163. First, LBIE's stock inventory account would, as a result of the first ticket, momentarily show a long position by reference to that type of security and, until the settlement date, a debt due to the street counterparty for the purchase. The second ticket would generate a long position in LBF's stock inventory account with a corresponding unsecured debt due (but not yet payable) to LBIE in its pending transactions inter-company account, for the same amount.

The Settlement Date

164. Completion of the purchase of the securities by LBIE from the street almost invariably required LBIE to pay cash to the street counterparty, and this was recorded in LBIE's books, which from then on showed LBIE as the holder of the relevant rights to the security as against its depository. By contrast, the LBIE and LBF accounting records showed LBF as owing LBIE an unsecured debt for the acquisition price as both due and payable, reflected in the transfer of that debt from the pending transactions inter-company account to the unsecured inter-company account. LBF continued to be recorded in its stock inventory as having a long position in respect of that type of security, as it had been since the trade date. LBIE's stock records showed that its long position in that security as against its depository was allocated to its inter-company account with LBF.

Rascals Processing

165. As might be expected from the nature of LBF's equity-based derivatives business, most of LBIE's security acquisitions for its account related to equities, with the consequence that most of the Rascals transactions between LBIE and LBF were of the manual type. It is nonetheless convenient to deal with the processing of Automatic Rascals transactions first.

Automatic Rascals

166. The ITS system was programmed automatically to recognise securities eligible for Automatic Rascals processing. It is unnecessary to describe the eligibility criteria (save to note that it excluded, among others, securities issued by a Lehman Group company and securities which were so illiquid as to be generally unsuitable for stock lending to the street). The computer programme identified securities of a particular type as eligible or ineligible by what the evidence describes as a "tag" which could be manually switched between those two classes.

167. A security tagged as eligible for Automatic Rascals was thus identified automatically by the ITS system which, on the settlement date for the acquisition of the security from the street, generated both a deal ticket setting out the essential terms of the one day repo, and separate trade tickets for each of the on and off legs of that repo. The deal ticket and both trade tickets were generated on the settlement date, i.e. day one of the first repo.

168. Both tickets caused automatic accounting entries to be made in ITS. The on-leg was reflected in an unsecured debt owed to the affiliate by LBIE, in the amount of the

marked to market value of the security that day. This was booked to the same unsecured inter-company account as showed LBF's debt to LBIE for the acquisition price from the street. The off-leg generated a secured debt owed by the affiliate to LBIE (payable the following day) as the repurchase price, into which was built the one day interest charge payable by the affiliate.

169. Thus, at midnight on the settlement date (the end of day one of the first repo) the combined effect of the acquisition of the security from the street for LBF's account and the making of the first repo may, in terms of accounting entries, be summarised as follows. First, LBF continued to record the security acquired as a long position in its inventory account. Secondly, the unsecured inter-company account between LBIE and LBF would show largely off-setting debts each way, owed to LBIE for the acquisition price and to LBF for the repo on-leg price. If the security was marked to market at its original trade price, the debts would precisely off-set. If not, there would be an amount owing unsecured, to LBIE if the security had declined in value, and to LBF if it had increased in value. Finally, the secured inter-company account between LBIE and LBF would show a debt to LBIE in respect of the off-leg repurchase price, payable on day two.

170. On the day after the settlement date for the acquisition from the street (day two of the first repo) accounting entries were made to reflect the settlement of the off-leg of the first repo, the settlement of the on-leg of the second repo, together with the secured liability of LBF to pay LBIE for the settlement (on the following day) of the off-leg of the second repo. Any change in the marked to market value of the security would be reflected in the prices payable and repayable under the second repo and, again, the off-leg purchase price would have added to it a one day interest or financing charge payable by LBF.

171. Thus, LBF's obligation to pay for the settlement of the off-leg of the first repo was transferred from secured to unsecured inter-company account, where it would be largely offset by LBIE's obligation to pay for the on-leg of the second repo, differences in marked to market values being reflected in a corresponding change in the unsecured inter-company balance between LBIE and LBF. LBF's secured liability to pay for the off-leg of the second repo would be recorded in the secured inter-company account. Viewed as at midnight at the end of the second day, LBF's secured liability to LBIE (in respect of the off-leg of the second repo) would therefore have changed from the amount shown as a secured liability at the end of day one, in line with any change in the marked to market value of the security.

172. Accounting entries reflecting daily repos of the type which I have described continued to be made throughout the period between the acquisition of the security from the street and its ultimate re-sale to the street. It is unnecessary to describe them in any detail. Their overall effect was to show LBIE as the secured creditor of LBF, albeit in constantly changing amounts, in respect of the continuous succession of off legs.

173. On the trade date for the re-sale to the street, a short position would be recorded in LBF's inventory account, off-setting the original long position recorded on the trade for the acquisition. Daily repos would continue between the trade date and the settlement date for the re-sale to the street. No new repo would be entered into between LBIE and LBF on the settlement date. Thus, on that day, LBF's secured liability to pay for the last off-leg would be transferred to unsecured inter-company

account and largely off-set by LBIE's obligation to account for the proceeds of sale received from the street counterparty, subject to movements in the marked to market value of the security between trade date and settlement date.

174. Mrs Greenway's evidence (as the principal interpreter of the accounting entries) was that each off-leg appeared to settle prior to the succeeding on-leg, and that the final off-leg settled prior to LBIE's settlement of the re-sale to the street, so that there were, at least in theory, moments on every day when LBF's secured liability to pay the off-leg purchase price was recorded as replaced by an unsecured liability in the same amount, before being largely off-set by LBIE's unsecured obligation to pay for the next on-leg, or, on the final day, to account for the proceeds of the re-sale to the street.

175. Furthermore, some of the evidence about the ITS accounting entries, in particular an example given by Mr Stacey of a particular Automatic Rascals process which occurred at the time of the collapse (Friday 12th September – Monday 15th September 2008) suggests that some hours may have elapsed between the making of the accounting entries for the settlement of the off-leg and the making of the entries recording the settlement of the following on-leg. Much debate has been focused on whether these apparent intra-day time lags are of any greater legal significance than is, these days, usually attributed to a *scintilla temporis* or, in modern parlance, a nanosecond.

Manual Rascals

176. The open-ended nature of the stock loans used for the purposes of Manual Rascals makes it much easier to describe their accounting treatment. Technically, the full description would be more complicated because the entries involve both the Global 1 and ITS systems, but their interpretation is uncontentious.

177. The accounting entries reflecting the acquisition by LBIE from the street of a security which is then Manually Rascalled are the same as those for a security subjected to Automatic Rascals. Thus, on the settlement date of that acquisition, LBF is shown as owing the acquisition price to LBIE on unsecured inter-company account.

178. The first point of difference between Automatic and Manual Rascals is however that the evidence does not permit any conclusion safely to be drawn as to whether Manual Rascals was generally, or even usually, applied on the settlement date of the acquisition of the security, or upon some later date. After increasingly inconclusive debate, the parties eventually accepted that, if that timing issue mattered in terms of beneficial ownership now, I should express my conclusions on the alternative assumptions that Manual Rascals was, or was not, applied on the settlement date for the acquisition.

179. The result of that is that at the end of the day of the settlement with the street, in relation to a security which had yet to be Manually Rascalled, the book entries will show merely an unsecured debt due and payable by LBF to LBIE for the whole of the acquisition price.

180. The stock loan invariably used for Manual Rascals processing involved first, the creation of a trade ticket which, by contrast with the repo deal tickets and on-leg trade

tickets, makes no reference to the consideration for the stock loan. Nor is there generated on day one of the stock loan any trade ticket for the off-leg.

181. The financial accounting entries arising from the stock loans were dealt with on an aggregate basis for the relevant day, rather than on an individual basis, as with repos. Nonetheless, their effect, in relation to an individual stock loan, is to treat the monetary collateral invariably to be provided by LBIE as an offset against LBF's debt to LBIE for the acquisition price, on the unsecured inter-company account, and to treat LBF's future liability to repay collateral to LBIE as, in effect, a secured loan of the same amount by LBIE to LBF, in substantially the same way as the entries recording a repo.

182. The open-ended stock loans between LBIE and its affiliates (including LBF) included provision for margining the collateral, that is increasing or reducing it in accordance with rises or falls in the value of the underlying security. The amounts required to be paid by way of margin adjustment each way were reflected in the unsecured inter-company account between LBIE and LBF, and the consequential increase or decrease in the monetary collateral reflected in adjustments of the amount by which, in the secured inter-company account, LBIE was shown to be a secured creditor of LBF.

183. Finally, on the settlement date for the re-sale of the security to the street, the off-leg of the stock loan is reflected in a trade ticket, together with accounting entries which show off-setting entries in unsecured inter-company accounts between, on the one hand, LBF's liability to repay the collateral to LBIE, and LBIE's liability to account for the proceeds of the sale to the street. In that respect, the entries broadly correspond with the off-leg of the final repo in a series of Automatic Rascals transactions. Some stock loans were closed earlier than upon the resale of the security to the street, for example when an underlying loan of that security to the street ended, or if an intended loan to the street did not proceed. It is unnecessary to describe the accounting entries made in that event.

<u>Month End Netting, Novation And Pay Down</u>

184. LBF had no bank account of its own, and was therefore unable directly to settle unsecured inter-company balances with LBIE by cash payment. Unsecured balances were, instead, dealt with as follows. At the end of each month, temporary journal entries were made reflecting a netting, as between LBIE and LBF, of all unsecured inter-company balances, and the novation of the resulting net balance to LBHI. By that I mean that LBHI was interposed between LBF and LBIE, so that any net debt on the unsecured inter-company account owed by LBF to LBIE was replaced by a debt from LBF to LBHI, and a debt from LBHI to LBIE. If the net balance was owed the other way, LBIE would owe LBHI, and LBHI would owe LBF. Similar arrangements existed as between LBIE and certain other affiliates, including LBSF, LBCCA and LBAH, but not LBI.

185. Pay down of the net inter-company balance thus created, for example between LBIE and LBHI, was subject to the obtaining of various Group internal approvals, and did not occur every month. For months where there was no pay down, the temporary month end journal entries to which I have referred were then reversed at the beginning of the next month. For months where there was pay down, the journal entries became permanent.

186. What matters for present purposes is that the secured balances owed by LBF to LBIE at the end of the month in respect of Rascalled securities, whether there was a pending stream of one day repos or an open stock loan, were not included within the month end netting, novation and pay down processes between LBIE, LBF and LBHI. That much is common ground. The consequences, in terms of an understanding of how the Rascals processes worked (if they did) and were paid for (if they were) has nonetheless been a matter for protracted argument.

LBSF

187. It is convenient to take the reflection in the accounting entries of the implementation of Rascals between LBIE and LBSF out of turn, mainly because, subject to one significant exception, the accounting treatment was in all respects the same as between LBIE and LBF. The only significant difference relates to the manner in which LBIE's purchases of securities from the street for LBSF were recorded in terms of trade tickets.

188. I have already described above how, as between LBIE and LBF, two trade tickets were generated on the trade date of any securities acquisition from the street for LBF's book. In the case of LBSF, and for reasons which remain largely a matter of conjecture, such acquisitions from the street were recorded sometimes by two trade tickets and sometimes by a single trade ticket. Furthermore, acquisitions from other affiliates were on occasion recorded by three trade tickets, but they can be ignored for present purposes.

189. Cases where acquisitions led to the generation of two trade tickets were dealt with in all relevant respects in the same way as between LBIE and LBF. Single trade tickets consisted of the electronic record of a direct trade (i.e. contract) between LBSF and the street counterparty. The only reference in the ticket to LBIE was the identification of a LBIE account number for settlement of the trade. All the other accounting entries generated both by the trade and its settlement were the same as between LBIE and LBF, save only that, in relation to single ticket trades, no entry was made in LBIE's stock inventory.

190. The natural inference from the use of a single ticket is that LBSF rather than LBIE was in fact the contracting Lehman party with the street counterparty. By the end of the hearing that had become, more or less, common ground. In any event, I find that to be the probable explanation. What remains entirely unclear is why, on any particular occasion, LBSF rather than LBIE contracted with the street. It may have been merely a consequence of the rules of the particular exchange or clearing house on or across which the relevant securities had to be traded or settled. For present purposes the reason does not matter and, to the extent that the use of one or two tickets to record a relevant trade has any consequence upon beneficial ownership now, I am invited to deal with them alternatively. As will appear, I have concluded that it makes no difference.

191. Another consequence of LBSF's fixed income derivatives business is that most of the Rascals processing applied to security dealings by LBIE for its book were Automatic rather than Manual, the opposite being the case for LBF. In the end, nothing turns on that difference either.

LBCCA/LBAH

Acquisition From The Street

192. Subject to one difference, the recording in the Group's records of LBIE's acquisition of securities from the street for the book of LBCCA was in all respects the same as for LBF and LBSF. The only difference, of no import for present purposes, is that (so far as research has revealed to date) they were all single ticket transactions, the implication being that LBCCA itself contracted with the street counterparty in every case.

Rascals Processing

193. It is at this stage that the recording of transactions relating to securities acquired by LBIE for LBCCA's book diverges from the pattern so far described, and in a manner which has given rise to serious complexity and difficulty, as a matter of interpretation, albeit only one dispute as to primary fact. There is also a baffling difference between the manner in which Automatic and Manual Rascalling of such acquisitions was dealt with, for which it is impossible to find any rational explanation.

Automatic Rascals

194. It will be recalled that there existed, from November 1997, a NNA between LBIE, LBCCA, LBAH and a number of other Far Eastern Group companies, to which LBHI was added as a party with effect from June 2000, and which was expressed to apply both to debts and to deliverables. It is obvious that those in London and Hong Kong responsible for the implementation of Automatic Rascals in relation to securities acquired for LBCCA's trading book thought that in some way the effect of the NNA was to transfer title to the underlying securities from LBCCA to LBAH, along with the inter-company unsecured debts incurred by LBCCA in connection with LBIE's acquisition of those securities. Thus, the whole of the Automatic Rascalling applied to those securities was conducted, so far as the Group records show, entirely between LBIE and LBAH, to the complete exclusion of LBCCA. Nonetheless, the LBCCA inventory records continue to show it rather than LBAH as having a long position in the underlying securities, and both LBCCA's and LBIE's records continue to show LBCCA as owing an unsecured debt to LBIE for the whole of the purchase price, at least from each settlement date until the end of the month in which it occurred. This is, if for no other reason, because the entries which in the case of LBF record LBIE's on-leg obligations as offsetting the affiliate's original acquisition debt simply never arrive in the inter-company unsecured account between LBIE and LBCCA, being recorded instead in the unsecured inter-company account between LBIE and LBAH.

195. Nothing in any of the Group's records, (leaving aside the NNA itself) shows how, if at all, LBAH was clothed with sufficient title to the underlying securities to be able to repo them up to LBIE. Furthermore, as between LBIE and LBAH, LBIE's obligation to pay the on-leg purchase price arrives in the inter-company account between those two companies with nothing already owed the other way available for offset. LBIE is nonetheless shown as LBAH's secured creditor in respect of the repurchase price for the off-leg.

196. The matter becomes even more opaque (in terms of interpretation) at the end of the month. At this point, all unsecured inter-company balances between LBIE, LBAH, LBCCA (and certain other Hong Kong entities) are novated and netted so as to give rise to a substitute single inter-company balance, not between LBAH and LBIE (as might have been supposed pursuant to the NNA) but between LBHI and LBIE.

197. Furthermore, the effect for LBCCA of that month end process was to substitute LBHI for LBIE as LBCCA's unsecured creditor for a sum equivalent to the whole of the acquisition price for the underlying securities rather than, as between LBIE and LBF, merely for the unsecured element left behind after extracting the secured amount financed by the Rascals process.

198. For LBIE the effect of the month end process on the unsecured inter-company account was no different from what it would have been if Automatic Rascals had been processed directly with LBCCA, or if the LBCCA acquisition price debts had been novated up to LBAH immediately, rather than straight to LBHI at the month end. This is because the offset which would then have occurred every day between the acquisition debt and the first repo on-leg purchase price debt occurred in bulk when they both arrived at LBHI at the month end, when LBAH's unsecured receivables from LBIE and LBCCA's unsecured payables to LBIE are both novated up to LBHI and netted. As Mr Milligan put it, it all comes out in the wash at the month end so far as concerns the unsecured balances, at least from LBIE's perspective.

199. Looked at from LBCCA's viewpoint, the month end position actually recorded is not the same as would have resulted from direct participation in Automatic Rascals, or if an immediate novation of the acquisition debts had taken place with LBAH. LBCCA was never recorded as a secured debtor of LBIE in relation to Automatic Rascals, but LBAH was. More significantly LBCCA continued to owe LBHI the whole of the acquisition price from the street after the month end, rather than the net amounts (if any) remaining after offset between the acquisition debt and the on-leg purchase debt. Similarly LBAH remained a creditor of LBHI for the on-leg purchase debt. The underlying securities remained reflected in long positions on LBCCA's inventory account throughout.

200. The Administrators' case was, by the end of the hearing, that this imbalance between LBCCA and LBAH was in fact sorted out at the year end, by the belated recognition of a novation to LBAH of LBCCA's aggregate acquisition debt, thus enabling the missing offset with the on-leg purchase debt to take place after the event. There was conflicting evidence about this, between on the one hand Mrs Greenway and Mr Gibb for LBIE, and Mr Alldis for LBCCA/LBAH on the other. Due to the production of LBCCA's 2007 accounts just before the end of the hearing, this evidence continued to arrive (with my permission) thereafter, and Mr Alldis's departure on holiday then led to a situation where a further adjournment of several weeks would have been required in order for the issue to have been subjected to full research, reply evidence and, if necessary, cross examination. The issue whether there was such a year end adjustment, and if so as to its precise effect, was highly technical, and heavily dependent upon after-the-event interpretation of inadequate materials. I therefore directed that there should be no further procedure in relation to this issue, and that I would give judgment on the alternative bases that there had been or had not been such a year end adjustment, to the extent that it mattered.

MANUAL RASCALS

201. The thinking which identified LBAH rather than LBCCA as LBIE's proper counterparty for Automatic Rascals was not applied to Manual Rascals, where the stock loans were entered into directly between LBCCA and LBIE. Again, no rational explanation for this difference of treatment has emerged, or even been proffered. The accounting treatment of Manual Rascals transactions between LBIE and LBCCA was also complicated, by comparison with that which I have described as between LBIE and LBF. The complications relate to the manner in which LBIE's obligation to pay collateral to LBCCA in relation to the on-leg of the stock loan is recorded.

202. The first entry in relation to any particular stock loan consists of the recording of LBIE's collateral liability in a cash memo account, as part of the daily aggregate arising from similar transactions, not only between LBIE and LBCCA, but also between LBIE and other Hong Kong affiliates. By "similar transactions" I mean equity financing transactions relating to securities of the same type. The net aggregate balance is then posted to LBIE's account with LBHI and LBHI's account with LBAH.

203. No entry is made in LBCCA's books recording a receivable from LBIE in respect of the collateral. Nonetheless is appears that an equivalent receivable is recorded as owing to LBCCA from another Lehman Hong Kong company Lehman Brothers Asia Capital Company ("LBACC"). Mrs Greenway's evidence (unchallenged on this point) was that, by reference to complicated inter-company entries between a number of Lehman Brothers Hong Kong companies under what she described as the Global Cash and Collateral Management System ("GCCM"), it was nonetheless possible to link the LBIE obligation to pay the collateral with the receivable recorded as owing to LBCCA by LBACC, so that, taking those complicated records as a whole, it was appropriate to describe LBIE's obligation in relation to the collateral as shown as owing indirectly to LBCCA, as it were, round the houses. Nonetheless, at no time does LBIE's collateral obligation appear in the same inter-company account as LBCCA's obligation to pay the acquisition price, so that it is not obvious how they can have offset each other, at least prior to month-end novation and netting through LBHI.

204. The ITS system does nonetheless record a secured obligation of LBCCA to repay the collateral to LBIE on the off leg, in the same way as in relation to the other affiliates. This persists for as long as the stock loan remains open, and is reflected in both LBIE's and LBCCA's accounts.

LBI

205. By contrast with the complicated and confusing picture which I have described in relation to the Hong Kong affiliates, the accounting relationship between LBIE and LBI was straightforward. LBIE and LBI entered into no Automatic Rascals transactions at all, and there is good reason to doubt whether the stock loans by which, from time to time, LBI purported to lend its beneficial interest in particular stock to LBIE really form part of any Rascals process at all. Nonetheless, for present purposes, it is common ground that I should give directions as to the present beneficial ownership of securities which (a) were settled by LBIE into one of its

depots for LBI's account; (b) were then made the subject of a stock loan by LBI to LBIE; and (c) remain held in a LBIE depot.

206. The accounting treatment of LBIE's acquisition of such securities from the street was no different from that applied to acquisitions for the other affiliates, which I have already described. As between LBIE and LBI, they gave rise to single trade tickets, rather than to pairs, the implication being that LBIE merely settled trades which had been entered into directly by LBI with the street counterparty. The starting point from an accounting perspective therefore is that the settlement of such trades created an unsecured liability of LBI to LBIE to pay the acquisition price, recorded on inter-company account.

207. By contrast with the other affiliates, there existed between LBIE and LBI a system for regular pay down of unsecured inter-company liabilities which was operated on a frequency that varied between daily and about two or three times a week. Thus, unless a security settled by LBIE for LBI's account was subjected to a same-day stock loan, LBI's liability to refund LBIE for the acquisition price paid to the street would simply be discharged in full by the next regular pay down.

208. By contrast, if a stock loan intervened, either on the same day or in any event prior to the next pay down, then any net balance between LBI's liability for the purchase price and LBIE's liability for the collateral would be dealt with at the next pay down.

209. Similarly, unsecured inter-company liabilities between LBIE and LBI arising from margin adjustments to the collateral under stock loans (as already described in relation to LBIE and LBF) would be swept into the regular pay down process in the same way.

210. For reasons which remain unexplained, the accounting records ceased to show any entries in respect of liabilities to pay collateral in respect of some of the stock loans, as between LBIE and LBI, after the end of May 2008.

THE GROUP'S COLLAPSE AND ITS AFTERMATH

211. LBIE went into administration shortly before 8 a.m. on 15th September 2008. All the respondent affiliates went into forms of insolvency process within the same week or shortly thereafter. LBHI's insolvency process started just before that of LBIE. On the same day the Administrators caused an instruction to be given to all LBIE's staff, to the effect that no trades or other transactions were to be entered into without the Administrators' consent. I shall refer to it (adopting the parties' own abbreviation) as the "blanket instruction".

212. On 16th September, under cover of an email timed just after 5 p.m., LBF notified LBIE of the termination of all inter-company agreements or arrangements between them, to the extent that they authorised LBIE to act on behalf of or as an agent for LBF, without specific approval, adding that no further transactions in cash or securities were allowed.

213. The winding up petition in relation to LBAH was presented on 19th September 2008, thereby giving rise to an event of default under clause 10 of the GMRA between LBIE and LBAH.

214. The Automatic Rascals process operated, as I have described, without the need of any human intervention at all. It therefore continued, as between LBIE and the relevant respondents (i.e. LBF, LBSF and LBAH) during the whole of the week beginning 15th September 2008, continuing to generate routine book entries of the types which I have described.

215. On 23rd September, shortly after midday (London time), and without any prior discussion with the Administrators, an employee of LBIE manually switched all the tags which governed the eligibility of securities of a particular type for Automatic Rascals processing from eligible to ineligible, with the result that the ITS system recorded all pending repos as having their off-legs settled on that date, and recorded no further repos thereafter. The effect of stopping the Automatic Rascals process in that way was that the ITS system recorded unsecured liabilities of each of the relevant affiliates arising from their obligations to pay the off-leg repurchase price in relation to each repo, with no corresponding offset constituted by a LBIE obligation to pay the on-leg purchase price of any further repo, and no continuing secured liability, the off leg having apparently settled. One interpretation of those entries, which of course the respondents adopt, is that LBIE thereby handed back to the affiliates beneficial title to all securities subject to Automatic Rascals, leaving itself only with unsecured debts owed by its, by then, hopelessly insolvent affiliates.

216. Consistent with one of the objectives of the Rascals process, a very large proportion of the underlying securities were out on loan by LBIE to the street at the time of the collapse. In respect of a large proportion of those, LBIE has been unable to pay the off-leg repurchase price, or repay the collateral, necessary to get back equivalent securities from its street counterparties. The result is a large shortfall between the securities now held by LBIE in its house depots and the amount to which the affiliates lay beneficial claim. Nonetheless the value of those which remain is extremely large. They are mixed with securities which were never Rascalled and with securities held for LBIE's own trading book. They are subject to various other competing claims, and to the resolution of issues such as lien and the consequences of shortfall which are not for determination on this application.

GLOBAL CLOSE

217. The various office holders in charge of the insolvency processes of the majority of the Group's trading companies, including LBIE and the respondents, have attempted to identify their financial position at the collapse, including reconciling inter-company balances within the Group, following the collapse, by a process known as Global Close. They chose close of business on 12th September 2008 as the accounting reference date, and used the going concern principles and policies habitually used by the Group for its regular reconciliation exercises hitherto.

218. The relevance of Global Close to the issues arising in this application is limited. The choice of 12th September 2008, just before the collapse, means that the effects of the switching off or other termination of the Automatic Rascals process were not captured by that exercise. Nonetheless because of the tendency of ITS entries to be reflected upwards via DBS into the separate companies' own books, the net unsecured balances caused by the Rascals processes while up and running are generally reflected in the Global Close reconciliation.

219. The secured balances are also captured, on the assumption that at the accounting reference point the Automatic Rascals repos were all at the stage of an on-leg: i.e. that they were not at that moment in time (if any) between the settlement of an off-leg and the settlement of the on leg for the next repo. Similarly, all relevant stock loans under Manual Rascals were also open, thereby capturing all secured liabilities of the affiliates to repay collateral.

ANALYSIS

A. DID LBIE'S ACQUISITION OF SECURITIES FOR THE ACCOUNT OF AN AFFILIATE GIVE RISE TO ANY BENEFICIAL INTEREST FOR THE AFFILIATE?

220. This is the question which all the parties (for their separate tactical reasons) have invited me to address, as arising logically prior to the application of Rascals processing to any such securities. This application is about (and only about) Rascalled securities. My complaint during the hearing that, in relation to Rascalled securities, this seemed to me rather an unreal question, fell on deaf ears. It is no doubt an important question in relation to securities held by LBIE for an affiliate's book at the time of the collapse which were not Rascalled. But those securities are not the subject of this application. It is a rational historical question in relation to securities acquired by LBIE for an affiliate's book under the global settlements practice which prevailed before Rascals was implemented (i.e. before 1996), but it is not suggested that any of the securities acquired that long ago were still in a LBIE depot at the time of the collapse.

221. In relation to Rascalled securities, it is an inescapable aspect of the relationship between LBIE and each affiliate that, upon or after acquisition, they were to be or might be Rascalled, either because they were eligible securities for Automatic Rascals, or securities sufficiently worth being lent to the street to be Manually Rascalled. The fact that Rascals processes were to be or could be applied to eligible securities is an essential part of the terms upon which LBIE acquired them for the books of the affiliates, and cannot therefore be ignored when considering whether LBIE acquired them as trustee rather than as absolute owner.

222. A conclusion that the Rascals processes applied to the securities were and remain effective to confer absolute title on LBIE would deprive this prior question of any relevance. Nonetheless it matters because of the affiliates' case that, for different reasons, the Rascals processes were ineffective for that purpose, either because LBIE never paid for the on-leg, or because LBIE transferred title back to the affiliate on the final off-leg (Automatic Rascals) or because LBIE holds them on resulting trust (Manual Rascals) or, finally, because in relation to LBCCA the Automatic Rascals processing was transacted with the wrong affiliate.

223. I have concluded that the most useful way in which (at the parties' insistence) I should address this first question is in two stages. First I shall address it in relation to the period before 1996, that is after the institution of the global settlements practice, but before LBIE and any affiliate had decided to apply Rascals processing to securities acquired for that affiliate's book. Secondly I shall address the question by

reference to the period after the introduction of Rascals, on the footing that LBIE and each of its affiliates (with the possible exception of LBCCA) intended that relevant securities acquired by LBIE for that affiliate's book were to be Rascalled Automatically, or were liable to be Manually Rascalled at LBIE's discretion.

224. At each stage the question whether the acquisition gave rise to a proprietary interest for the affiliate, and therefore a trustee beneficiary relationship between LBIE and the affiliate, is governed by the same legal principles, to which I now turn.

THE LAW

225. I set out below what I conceive to be the principles to be applied, where A acquires title to property for the account of B, to the question whether B thereby obtains a proprietary interest in that property. I do so initially merely by stating those principles. Later, I shall to the extent necessary look in more detail at some of them.

The Principles

i) The recognition of a proprietary interest of B in property where A has the legal or superior title necessarily assumes the existence of a trust as between A and B.

ii) There can be no such proprietary interest if the necessary trust would fail for uncertainty.

iii) A trust of part of a fungible mass without the appropriation of any specific part of it for the beneficiary does not fail for uncertainty of subject matter, provided that the mass itself is sufficiently identified and provided also that the beneficiary's proportionate share of it is not itself uncertain.

iv) A trust does not fail for want of certainty merely because its subject matter is at present uncertain, if the terms of the trust are sufficient to identify its subject matter in the future.

v) Subject to the issue of certainty, the question whether B has a proprietary interest in the property acquired by A for B's account depends upon their mutual intention, to be ascertained by an objective assessment of the terms of the agreement or relationship between A and B with reference to that property.

vi) The words used by the parties such as "trust", "custody", "belonging", "ownership", "title", may be persuasive, but they are not conclusive in favour of the recognition of B's proprietary interest in the property, if the terms of the agreement or relationship, viewed objectively, compel a different conclusion.

vii) The identification of a relationship in which A is B's agent or broker is not conclusive of a conclusion that A is, in relation to the property, B's trustee, although it may be a pointer towards that conclusion.

viii) A relationship which absolves A from one or more of the basic duties of trusteeship towards B is not thereby rendered incapable of being a trustee beneficiary relationship, but may be a pointer towards a conclusion that it is not.

ix) Special care is needed in a business or commercial context. Thus:

(a) The law should not confine the recognition and operation of a trust to circumstances which resemble a traditional family trust, where the fulfilment of the parties' commercial objective calls for the recognition of a proprietary interest in B.

(b) The law should not unthinkingly impose a trust where purely personal rights between A and B sufficiently achieve their commercial objective.

x) There is, at least at the margin, an element of policy. For example, what appears to be A's property should not lightly be made unavailable for distribution to its unsecured creditors in its insolvency, by the recognition of a proprietary interest in favour of B. Conversely, the clients of intermediaries which acquire property for them should be appropriately protected from the intermediary's insolvency.

Commentary

226. Principles (i) and (ii) were not the subject of any dispute or elaboration by counsel, and may be taken as read. It is common ground that a trust may exist not merely between legal owner and ultimate beneficial owner, but at each stage of a chain between them, so that, for example, A may hold on trust for X, X on trust for Y and Y on trust for B. The only true trust of the property itself (i.e. of the legal rights) is that of A for X. At each lower stage in the chain, the intermediate trustee holds on trust only his interest in the property held on trust for him. That is how the holding of intermediated securities works under English law, wherever a proprietary interest is to be conferred on the ultimate investor. In practice, especially in relation to dematerialised securities, there may be several links in that chain.

Certainty

227. Principle (iii) is derived from Hunter v. Moss [1994] 1 WLR 452. It formed a central plank in the respondents' submissions. Mr Moss described it as the basis upon which securities are intermediated in the modern world, and therefore a principle to which the law should lend the broadest possible support. For his part Mr Milligan did not challenge the basic principle, or its operation in relation to a segregated securities account. He focused his attention on the requirement for a sufficiently certain mass of fungibles which, he submitted, could not be satisfied by an un-segregated house depot account which LBIE was free to use for lending to the street, and for meeting short positions, rather than being obliged to keep it whole. Further, he submitted that the probability that on any given day the supposed trust fund (constituted by LBIE's un-segregated house depot account for a particular description of security) would fall well short of the aggregate of the affiliates' supposed beneficial interests raised such difficulties of apportionment between them as to render the supposed trust uncertain as to its terms, as well as to its subject matter.

228. Hunter v. Moss was a very simple case on its facts. The defendant was registered as the holder of 950 shares in a company with an issued share capital of 1,000 shares. He orally declared himself a trustee for the plaintiff of 5% of the company's issued share capital, which the trial judge interpreted as meaning 50 of his 950 shares. Both

the judge and the Court of Appeal rejected the submission that such a trust must fail for want of appropriation of any specific shares out of the defendant's holding to satisfy the plaintiff's beneficial interest in 50 of them.

229. The Court of Appeal specifically distinguished Re London Wine Co (Shippers) Limited [1986] PCC 121, in which Oliver J had found that the issue to customers by a wine dealer of certificates of title describing them as beneficial owners of specific quantities of wine of specified types and vintages failed to create a proprietary interest under a trust because the dealer had never appropriated specific quantities of matching wine to each of its customers from stocks held in bulk in its warehouses. The reason for the distinction appears more clearly from the judgment of the trial judge (Colin Rimer QC as he then was) at [1993] 1 WLR 934, at 940 and 946, namely that the complete fungibility of the block of shares made it irrelevant which 50 of the 950 should be identified for the purpose of giving effect to the trust.

230. The Court of Appeal also distinguished Mac-Jordan Construction Limited v. Brookmount Erostin Limited [1992] BCLC 350, in which a developer's failure to carve from its general assets a retention fund for its builder pursuant to an obligation in the building contract, before becoming insolvent, was held to preclude the identification of the necessary subject matter of an enforceable trust of the retention monies. Again, the precise basis for the distinction is not spelt out in Hunter v. Moss, but it is reasonably clear that the Court of Appeal thought that the defendant's holding of 950 shares in a particular company was a sufficiently specific fund, separate from the defendant's general assets, to resolve any issue as to certainty of subject matter, any further appropriation to the plaintiff's specific interest being unnecessary.

231. Hunter v. Moss has not been without its academic and judicial critics, but its conclusion that there is no objection on the grounds of uncertainty to a trust of part of a shareholding of the trustee has been generally followed, in this country in Re Harvard Securities [1997] 2 BCLC 369, in Hong Kong in Re CA Pacific Finance Limited [2000] 1 BCLC 494, and in Australia in White v. Shortall [2006] NSW SC 1379.

232. The difficulty with applying the Court of Appeal's judgment in Hunter v. Moss to any case not on almost identical facts lies in the absence of any clearly expressed rationale as to how such a trust works in practice. There has not been unanimity among those courts which have followed Hunter v. Moss, nor among the many academics who have commented upon it, as to the correct approach. The analysis which I have found the most persuasive is that such a trust works by creating a beneficial co-ownership share in the identified fund, rather than in the conceptually much more difficult notion of seeking to identify a particular part of that fund which the beneficiary owns outright. A principal academic advocate for the co-ownership approach is Professor Roy Goode: see for example "Are Intangible Assets Fungible?" [2003] LMCLQ 379. Among the judicial commentators I have found the analysis of Campbell J in White v. Shortall (*supra*) at paragraph 212 to be the most persuasive. My own preference for the co-ownership analysis may be observed in LBIE v. RAB Market Cycles [2009] EWHC 2545 (Ch), at paragraph 56. I propose to adopt it for the purposes of the analysis which follows.

233. Neither Hunter v. Moss nor any of the decisions of the common law courts which have followed it address the subject matter certainty issues raised in the present case

as a result of LBIE's liberty to deal with securities acquired and held for the time being for the account of affiliates, by lending them to the street or by using them to settle short positions of other affiliates or of LBIE itself. All that the cases do is to demonstrate, by contrast with Mac-Jordan Construction v. Brookmount (in relation to money) or Re Goldcorp Exchange Limited [1995] 1 AC 74 (in relation to gold bullion) how the identification of a fund of which the beneficiary is to be a co-owner may sufficiently satisfy the requirement of subject matter certainty. Thus it is no objection that the fund is beneficially shared with the trustee, as in Hunter v. Moss itself and in White v. Shortall. Nor is it an objection that a segregated fund (i.e. one in which the trustee does not share) is a constantly changing fund beneficially co-owned by a constantly changing class of the clients of the trustee: as in CA Pacific Finance Limited.

234. At the heart of Mr Milligan's submissions based upon subject matter uncertainty lay the undoubted fact that, at any moment in time, the supposed trust fund consisting of LBIE's house depot account in respect of a specific type of security (such as ordinary shares in ICI) might consist either of shares originally acquired, equivalent shares subsequently acquired by the exercise of rights under a repo or stock loan with the street, or simply shares subsequently acquired by LBIE to make good a shortfall caused by using shares to settle its own or other affiliates' short positions. Furthermore, the fund could (for reasons already explained) consist at a particular moment in time of no securities at all, where all had been used to settle short positions, or all had been lent to the street, so that the only identifiable trust property consisted of LBIE's personal rights to obtain equivalent securities in the future, for example by calling in stock loans or enforcing the off-legs of repos, as against street counterparties.

235. To meet this obvious and serious point of distinction with the Hunter v. Moss line of authority Mr Moss and counsel for the other respondents relied upon Principle (iv) above, namely that a trust does not fail for want of certainty merely because its subject matter is to consist of after-acquired property. For that principle Mr Moss relied simply on Tailby v. Official Receiver (1888) 13 App Cas 523. That was a case about an equitable assignment by way of security of all the present and future book debts of the assignor, without limit as to time or type. It shows that a trust is not vitiated by subject matter uncertainty merely because the trustee has, at the date of the creation of the trust, yet to acquire property answering the relevant description. Since it applied to all the assignor's future book debts however obtained, no question of subject matter uncertainty arose.

236. It is convenient at this point to break off my discussion of the legal principles applicable to this first main issue generally, and address the Administrators' uncertainty case directly, first in relation to subject matter and then in relation to terms. In both respects I shall first address the position as it was before 1996, when Rascals processing began to be implemented.

237. The starting point is that it is misleading to think of LBIE's house depot accounts as if they were simply one big omnibus account into which all its holdings of securities of any type were deposited, like some single bank account used for all its payments and receipts of cash. However they were recorded, the reality is that LBIE held a great multiplicity of positions on house depot accounts, one position for each type of security, by which I mean not one for equities and one for fixed income, but one for

ICI ordinary shares, one for BP ordinary shares, separate positions for any different class of shares of the same issuer, and further separate positions for different classes of fixed income securities, again, separately for each issuer. The question of certainty must be addressed by looking, conceptually at least, at each position individually, even if they were all recorded in one account. LBIE's depot account position for ICI ordinary shares is a convenient (if now purely historical) example. It would consist at any given moment in time of a chose in action against LBIE's depository in relation to a specified number of ordinary shares, and would consist of a beneficial co-ownership interest in the depository's total holding of shares of that type.

238. At any moment in time, the amount of shares so held by LBIE would be attributable to acquisitions from the street both for its own account and for the accounts of one or more affiliates, less shares sold to the street for those same accounts, but also, reduced by shares lent to the street and shares used to settle short positions, as already described. For all shares lent to the street LBIE would have contractual rights to obtain equivalent securities, subject to paying for them. For shares used to settle affiliates' short positions, LBIE would have similar rights against the relevant affiliates. As and when, at any later date, LBIE received back shares pursuant to its repos and stock loans with the street, the shortfall in the depot account would be made good *pro tanto* by equivalent shares attributable to the exercise of those rights.

239. Although the picture created by that analysis is very much more complicated than the simple facts of Hunter v. Moss, I consider that it gives rises to no fatal uncertainty of subject matter. The subject matter of the fund is, from start to finish, LBIE's holding of ICI ordinary shares or, more precisely, LBIE's beneficial co ownership interest in its depositary's holding of ICI ordinary shares, as shown in LBIE's relevant depot account with its depository. The subject matter of the fund may also include all LBIE's rights to recover equivalent securities from street lending counterparties, and its rights as against affiliates to make good short positions. The subject matter of each affiliate's beneficial interest is its co-ownership share in the fund thus constituted, which will (in principle, whether or not in practice) be readily ascertainable from Group records, showing the amount of those securities acquired for LBIE and for each affiliate, less the amounts disposed of, expressed as a proportion of the whole.

240. The question whether the fund consists simply of LBIE's proprietary rights in relation to the securities, or includes LBIE's personal rights to recover equivalent securities from street lending counterparties or from short affiliates is a question of intention, as between LBIE and its affiliates, rather than subject matter certainty. If the former, I see no uncertainty or other objection in a conclusion that the subject matter of the fund extends to equivalent securities once acquired by LBIE's exercise of those rights. If the latter, there is in my judgment no valid objection that the rights are purely personal and contractual, and not such as would be enforced by an order for specific performance: see again Tailby v. Official Receiver (*supra*).

241. As to the latter point, no-one doubts the beneficial interest of clients in a solicitor's client account. Yet the subject matter of that fund consists entirely of the solicitor's purely personal rights as a customer of the client account bank or banks.

242. I turn to address Mr Milligan's case based on uncertainty as to terms. By this he meant that, because of the typical shortfall in the fund constituted by LBIE's depot account, caused by lending to the street and the meeting of short positions, it was

impossible to say in relation to the depleted balance how it should be shared between LBIE and the affiliates for whose accounts the securities had been acquired. Should the matter be resolved, Mr Milligan asked rhetorically, by a first in first out approach or by a *pari passu* approach? It was no answer, he submitted, that the court would, in the case of a shortfall in an undoubted trust fund, resolve that issue by reference to settled equitable principles. To avoid a fatal uncertainty as to the subject matter of each affiliate's beneficial interest, the answer had to be found in the terms upon which the supposed trust was constituted.

243. I accept the premise for that submission, but not Mr Milligan's conclusion. Subject matter certainty requires not only that the identity of the shared fund is certain, but also that the proportionate amount of each alleged beneficiary's share is also certain. Thus, an uncertainty as to the terms upon which LBIE and its affiliates were to bear any shortfall would be destructive of the necessary certainty of each affiliate's beneficial share in the securities remaining in LBIE's depot account. In truth, uncertainty as to terms in this context means, or inevitably leads to, uncertainty as to beneficial subject matter.

244. But I see no reason why, on the assumption that LBIE and its affiliates had a common intention which authorised LBIE to operate its house depot accounts in a matter which included lending to the street and the making good of short positions, the consequential day to day shortfalls thereby created in the depot accounts should not be shared on a *pari passu* basis. Bearing in mind that the evidence shows that LBIE's operation of its house depot accounts in that way was an aspect of the Group settlements practice rather than something done idiosyncratically by LBIE behind the backs of one or more of its affiliates, there is no basis in fact for concluding that the manner in which LBIE operated those accounts before the implementation of Rascals was other than consensual. If all those interested in the fund consented to the arising of the shortfall inherent in the way it was managed, then I can see no reason why they should not be taken to have agreed to bear the consequences of the shortfall equally.

245. The law does not lightly allow contracting parties' purposes and intentions to be defeated by supposed uncertainty, and there is in my judgment no reason why the law should do so any more readily than normal merely because the issue is as to the validity of an intended trust. On the contrary, the law commonly recognises the creation of a trust as a necessary consequence of an intention that parties should share property beneficially, in circumstances where the parties themselves have given no thought at all to the terms of the consequential trust, if indeed they even recognised its existence. In all such cases the law fills the consequential gaps by implication, and by importation of generally applicable principles.

246. The beneficial ownership of matrimonial and other shared homes is a case in point. The courts have for many years wrestled with the difficulties which arise in quantifying the beneficial interests of cohabitees, in circumstances where a clear mutual intention that they should share the property necessitates the existence of a trust, in particular in cases where only one of them is the legal owner. Nonetheless, at no time during this protracted and difficult debate has the fact that the parties themselves frequently give no thought to the amount of their proportionate shares in the property led the courts to conclude that the intended trust fails for uncertainty.

247. By parity of reasoning, and on the assumption that LBIE and its affiliates intended that the affiliates should enjoy proprietary interests in securities acquired by LBIE for their account, the fact that the mode of LBIE's operation of its house depot accounts to which they all consented may throw up difficulties of analysis as to their proportionate shares in the securities which remain after the collapse is not a basis for concluding that the trust which the law necessarily recognises so as to give effect to their intended proprietary interests should fail for want of certainty, whether as to terms, or as to the amount of those beneficial interests.

248. I have thus far been considering the question of certainty in relation to the pre-Rascals period, and concluded that, if a trust was intended as the necessary consequence of the conferral upon affiliates of proprietary interests in securities acquired by LBIE for their account, such a trust would not fail for uncertainty. I can envisage no reason why a different conclusion should follow from that analysis, conducted after the implementation of Rascals. On the contrary, it seems to me that an argument of uncertainty would be weaker than in relation to the pre-Rascals period. The Rascalling of the relevant securities (if not defective in the various ways alleged by the respondents) would for the duration of the underlying repos and stock loans confer absolute title to the underlying securities upon LBIE, and therefore, for the same period, take them out of the supposed trust fund. The result would be that any lending of those Rascalled securities to the street would have no effect upon the constitution of the fund, thereby depriving Mr Milligan's submissions as to the uncertainties created by the consequential shortfall in the fund of most of their effect. If the Rascals processes were ineffective to confer absolute title upon LBIE, then the certainty issues would broadly match those which I have already addressed in relation to the pre-Rascals period. I can therefore return to the remaining legal principles listed above, all of which assist in answering the question whether a proprietary interest, and therefore a trust, was intended.

Intention

249. Principles (v) and (vi), which focus on the essential objectivity of the process of the ascertainment of the parties' mutual intention, were not in dispute between counsel, and therefore call for no justification. They serve as a warning against giving excessive weight to the labels used by the parties to describe their relationship, or even to the labels chosen to describe their supposed interests in the relevant property. Banking is fertile ground for the misuse of language in that context, as the habitual employment of phrases like "money in a bank account" or references to banks "looking after customers' money" demonstrates.

Agency

250. Principle (vii), namely that an agency relationship is not conclusive of, but only a pointer towards the existence of a trust relationship, was not directly challenged, but was the subject of extensive submissions. Enormous effort was devoted by the respondents towards demonstrating that LBIE acted as the affiliates' agent or broker in the making and settlement of securities transactions for their account, and valiant effort was deployed by Mr Milligan in challenging that assertion. It is therefore appropriate that I address the relevant agency principle in a little more detail. For this purpose, I shall refer to the agent or broker as A and the principal as B, in conformity with the analysis thus far.

251. The starting point is that the question whether A is B's agent does not fall to be answered in the negative merely because B contracts as principal with the third party: see Teheran-Europe Co. Ltd v. ST Belton (Tractors) Ltd [1968] 2 QB 53, at 59-60 per Donaldson J. In that case the judge was concerned with the question whether the terms upon which B contracted with the third party created any privity between A and the third party. Nonetheless Donaldson J's lucid description of the three ways in which an agent can conclude a contract on behalf of his principal puts the point beyond doubt. In the present case LBIE contracted with the street counterparty as principal in many, but by no means all, of the relevant securities trades. But that is perfectly consistent with LBIE having been the affiliate's agent for all purposes connected with the terms and consequences of the transaction, as between them.

252. A conclusion that, as between them, A acts as B's agent in the acquisition of property from C by no means leads to the inevitable result that B thereby obtains a proprietary interest in the property, such that it is held by A as his trustee. Nelson v. Rye [1996] 1 WLR 1378 is a classic example of a case in which that assumption was wrongly made, as is illustrated by the devastating critique of that judgment by Millett LJ in Paragon Finance v. DB Thakerar & Co [1999] 1 All ER 400, at 415-6. Nelson was a solo musician, managed by Rye, who collected Nelson's fees and royalties as his agent, with an undoubted duty to account. Nonetheless the terms of the agency relationship permitted Rye to mix Nelson's fees and royalties with his own money, to use them for his own cash-flow, to deduct his own commission and to account for the balance to Nelson only at the year end. Those features of the relationship were inconsistent with the existence of any trust of the receipts, and therefore with any proprietary interest of Nelson in them, for as long as they remained with Rye.

253. The true principles are in my judgment admirably summarised in Bowstead & Reynolds on Agency (19^{th} ed) in paragraph 6-041, from which I have drawn the following extracts (although the whole passage deserves reading in full):

> "The analogy with trust might be taken to suggest first, that when an agent holds title to money or other property for his principal, he always does so (in situations where the principal does not himself own it) as trustee. This would often be impractical and has never been the rule. It is perfectly possible for property so held, especially money, to be the agent's own, and mixed with his own assets subject only to a duty to transfer or account for it to his principal. Equally however he may certainly hold as trustee.
>
> Sometimes the answer turns on the contract between principal and agent. It is clear in this context and in general that the existence of a contractual relationship of debtor and creditor between the parties does not prevent the existence of a simultaneous trust relationship, or a fiduciary relationship of a less onerous nature, involving nevertheless that certain money or property is held on trust.
>
> Thus it may be provided expressly between principal and agent that money received is so held. At other times the intention to create a trust may be inferred; the matter turns on the objective

> interpretation, according to general principles, of the intentions of the parties.
>
> …the present trend seems to be to approach the matter more functionally and to ask whether the trust relationship is appropriate to the commercial relationship in which the parties find themselves; whether it was appropriate that money or property should be, and whether it was, held separately, or whether it was contemplated that the agent should use the money, property or proceeds of the property as part of his normal cash flow in such a way that the relationship of debtor and creditor is more appropriate.
>
> A relevant consideration also is whether money or property was received in pursuance of a single transaction for which the agent was appointed, or as part of a group of transactions in respect of which a general account was to be rendered later or periodically.
>
> Although the issue does not arise in many of the cases, a central question, really one of policy, and perhaps too often overlooked (because not in issue) is whether the rights of the principal are sufficiently strong, and differentiatable from other claims, for him to be given priority in respect of them in the agent's bankruptcy….
>
> Sometimes the position is secured by statute or regulation providing that particular types of functionary (e.g. estate agents and solicitors) hold clients' money on trust, pay into client accounts and keep trust accounts."

<u>Basic Duties of Trusteeship</u>

254. Principle (viii), that a trustee may be excused performance of basic trust duties without rendering impossible the existence of a trust, was also the subject of extended debate. Mr Milligan submitted that if A is permitted by B both to mix property acquired for B's account with his own property and to use it for the purpose of his own business, those incidents in the A/B relationship were necessarily, and fundamentally, incompatible with any relationship of trustee and beneficiary in relation to the property. He brought some powerful dicta to bear in support of that submission.

255. In <u>Paragon v. Thakerar</u> (*supra*) at p.416 in the passage to which I have already referred, Millett LJ said this:

> "It is fundamental to the existence of a trust that the trustee is bound to keep the trust property separate from his own and apply it exclusively for the benefit of his beneficiary. Any right on the part of the defendant to mix the money which he received with his own and use it for his own cash-flow would be inconsistent with the existence of a trust. "

256. In Ayerst v. C & K (Construction) Limited [1976] AC 167, at 180 Lord Diplock said this, in relation to the use of the expression "trust" and "trust property" in reference to the assets of a company in liquidation:

> "All that was intended to be conveyed by the use of the expression "trust property" and "trust" in these and subsequent cases (of which the most recent is *Pritchard v. M.H. Builders (Wilmslow) Limited* [1969] 1 WLR 409) was that the effect of the statute was to give to the property of a company in liquidation that essential characteristic which distinguished trust property from other property, viz., that it could not be used or disposed of by the legal owner for his own benefit, but must be used or disposed of for the benefit of other persons."

257. These, and other broad and general statements about the core characteristics of a trust need to be addressed with some caution. In Brown v. Inland Revenue Commissioners [1965] AC 244 a question arose as to the income tax treatment of interest received by a solicitor upon deposited client account money and used for his own benefit. The solicitor also lent client monies to other clients on interest bearing loans, and kept for himself the difference between the interest charged and the interest paid on clients' deposits. The House of Lords held that, in both respects, the solicitor's receipt of interest was an unauthorised secret profit, and a breach of trust. But Lord Reid added this, at page 258:

> "The appellant (*the solicitor*) supports this contention on the grounds of custom and implied agreement. On the facts found in the case he cannot succeed on custom if only because the practice is by no means universal and I shall not consider what the position would be if there were a custom in the legal sense. As regards implied agreement I do not doubt that clients could agree, if they so chose, to their solicitor making profit out of their money by using it in certain ways in certain circumstances. The fact that a solicitor is in a fiduciary position does not prevent him from making agreements with clients who are sui juris and are fully aware of the facts. And there might be circumstances from which an agreement could be implied."

258. In my judgment there is no immutable principle that an arrangement between A and B (where A acquires property for B's account) which includes a consensual disapplication of some fiduciary obligation generally regarded as a basic feature of a trust, thereby prevents the existence of a trustee beneficiary relationship arising between the parties, or the recognition of A's proprietary interest in the property. The Lehman Brothers litigation provides two recent examples. In LBIE v. RAB Market Cycles (*supra*) at paragraphs 60 to 63, I concluded that the prime broker's Right of Use under clause 11 of the standard form International Prime Brokerage Agreement (Charge Version) used by LBIE with its customers was, although a powerful contra-indication to the recognition of a trustee beneficiary relationship between LBIE and its customers under that agreement, not however inevitably fatal to it, if (as was the case) other aspects of the relationship pointed more powerfully in favour of a trust.

259. In LBIE (sub nom CRC Credit Fund Limited v. GLG Investments plc sub-fund) [2010] EWCA Civ 917, the Court of Appeal affirmed my decision that regulatory permission given to an investment firm to deposit clients' money in a house account before segregating it under the regime regulated by CASS 7 did not automatically mean that the statutory trust imposed by that regime was incapable of applying to client money until it had been segregated.

260. In my judgment the true principle which emerges from these cases is that, while there are no hard and fast rules whereby the consensual disapplication of some basic trustee duty precludes the recognition of a trustee beneficiary relationship between the parties, nonetheless the greater the extent to which those duties are disapplied, the harder it will be for the court to conclude, taking all relevant matters into account, that the parties objectively intended to create such a relationship between them.

The Business Or Commercial Context

261. Authority for principle (ix)(a), that the law should not, in a commercial context, be hidebound by traditional rules about trusts derived from their origin in family settlements, is to be found in Target Holdings v. Redferns [1996] AC 421, per Lord Browne-Wilkinson at p. 435-6. Principle (ix)(b) that the law should not unthinkingly impose a trust where purely personal rights between A and B sufficiently achieve their commercial objective is in my view no more than an aspect of the need to interpret commercial agreements and arrangements purposively.

Policy

262. The cited extract from Bowstead & Reynolds acknowledges the role to be played by policy considerations in the recognition or the denial of a trustee beneficiary relationship between agents and their principals. Mr Moss forcefully illustrated how deeply the concept of the trustee beneficiary relationship is embedded in modern thinking about intermediated securities, both by reference to the Financial Markets Law Committee's July 2004 Report on "Property Interests in Investment Securities" and to the Unidroit Convention on Substantive Rules for Intermediated Securities (signed in October 2009) which, although yet to be ratified by the United Kingdom, nonetheless commands the broad support (so Mr Moss informed me) of the Law Commission.

263. Nonetheless, both those documents (in section 8 of the FMLC Report and Articles 24 and 25 of the Unidroit Convention) assume that an effective system for the conferral and protection of proprietary interests in intermediated securities upon the clients of the intermediaries presupposes rules which require the intermediaries to maintain at all times a pool of securities sufficient to satisfy their clients' entitlement. Mr Moss (who was himself a contributor to the FMLC Report) did not persuade me that the basis upon which LBIE was free to use securities acquired for the account of affiliates for lending to the street, and for making good short positions, came near to satisfying that type of pool maintenance obligation.

264. As for the need to avoid the unthinking extension of proprietary claims in circumstances which infringe the *pari passu* principle in insolvency, sufficient authority is to be found in the observations of Lord Neuberger in Re B A Peters (In Administration) [2008] EWCA Civ 1604, at paragraph 21, as follows:

> "In my view, the court should not be too ready to extend the circumstances in which proprietary or other equitable claims can be made in insolvent situations, bearing in mind the consequences to unsecured creditors. To raise those in the commercial world, it must sometimes seem almost a matter of happenstance as to whether or not a particular creditor, with no formal security, has a proprietary or equitable claim. However the fact is that every time such a claim is held to exist in the case of an insolvent debtor, the consequence is that one commercial creditor gets paid in full to the detriment of all the other commercial creditors, who also have no formal security, but are found to have no proprietary claim."

Application To The Facts

The Pre Rascals Period

265. Having already disposed of the objection based on uncertainty, I now set out my conclusions on the question whether LBIE's acquisition of securities for the account of its affiliates gave rise to proprietary interests in the affiliates' favour. I shall first address the question in relation to the pre-Rascals period, i.e. on the basis that it was not part of the common intention of the parties that a security acquired by LBIE for an affiliate's book should thereupon or thereafter be Rascalled. The first question is whether, as the respondents all contend, LBIE was acting as the affiliates' agent or broker or whether, as the Administrators maintain, LBIE was acting as a principal in its own right. As already noted, this issue is clouded by the fact that the agreements between LBIE and the various respondent affiliates deployed in evidence almost all post-date this period. Nonetheless, I consider it legitimate to have regard to the recitals found in those agreements entered into by way of implementation of the Rascals project, to the extent that they describe an existing relationship, upon which the particular terms of those agreements were then to be superimposed. This is, in particular, because the recommendations of the Rascals working party which led to the making of those agreements were necessarily based upon a review of a pre-Rascals relationship between the parties in connection with the acquisition of securities by a hub company for its affiliates' accounts.

266. In my judgment the evidence clearly establishes that LBIE was indeed acting as the affiliates' agent or broker, rather than purely as a principal in its own right. My reasons follow.

267. The agreements which point that way may be summarised as follows. First, as between LBIE and LBF, there is the ICRA made in March 1996, the Agency Agreement made in November 1996 and the Brokerage Agreement made in March 1998. As between LBIE and LBAH there is the MPRA made in November 1997. As between LBIE and LBSF there is the MPRA made in November 1996, and the original Non-Discretionary Agency Agreement made in January 1994. Between LBIE and LBI there is the UCCBSA made in July 1994, the predecessor of the 1996 version described earlier in this judgment.

268. More fundamentally, the feature common to the relationship between LBIE and all of the respondent affiliates for the books of which it acquired securities was that LBIE

acquired and settled or (as the case may be) merely settled those securities into its house depot accounts upon the basis, and with the intent, that the economic risks and benefits inherent in the ownership of those securities would be for the account of the affiliates rather than for LBIE, both as to market risk and intermediate income.

269. For the purpose of understanding the relationship between LBIE and its affiliates, it is in my judgment nothing to the point that in relation to some, although not all, of the relevant acquisitions LBIE contracted with the street counterparties as principal, for the reasons which I have already given in relation to the Teheran-Europe decision of Donaldson J.

270. On any view, and in relation to all the relevant acquisitions, it is not seriously challenged by the Administrators that LBIE was liable to account to the relevant affiliate both for the proceeds of the ultimate sale of the security to the street and for any intermediate income received from the moment of acquisition onwards. Those are quintessentially characteristic of the obligations of an agent or broker for the affiliates.

271. Against that, it is equally common ground that LBIE did not, and was not expected to, comply with the other characteristic obligation of a broker, namely to "get into his possession, and retain, an equivalent number of shares" to those delivered to him under the acquisition contract: see Solloway v. McLaughlin [1938] AC 247 at 256. All that LBIE did in practice was to manage its house depot accounts in such a way as to ensure (for as long as it remained solvent) that it could settle trades by way of disposal of shares held for its affiliates' books, whether by retaining shares, borrowing them from the street or having recourse to securities held for its own book or for other affiliates. Nonetheless I consider that this consensual departure from the ordinary obligations of a broker comes nowhere near displacing a conclusion that, for all purposes in connection with LBIE's acquisition and holding of securities for its affiliates' books, LBIE's role was that of an agent or broker. It makes no difference for present purposes which of those two technically different but overlapping labels is to be applied.

272. I also accept, as the next stage in the respondents' submissions, that proof that LBIE acted as an agent or broker for its affiliates is a *prima facie* indication that the affiliates were to have proprietary interests in the securities thus acquired. That much seems to me to be implicit in the judgment of the Privy Council in Solloway (*supra*) at pages 257-8. But it is no more than a starting point.

273. It is to be noted from the *travaux preparatoires* of the Rascals committee, and from the recollection of Mr Bolland in evidence, that the general view within the Group (at least in London where the Rascals working party appears to have been based) was indeed that a hub company's acquisition of securities from the street for the books of affiliates did give rise to proprietary interests in the affiliates' favour, although some appeared to have thought that no such proprietary interest arose until the affiliate had refunded LBIE for the acquisition price. Nonetheless the subjective assumptions of Group employees about the legal consequences of the parties' arrangements are not the same as the objective ascertainment of intention to be derived from the terms of those arrangements, viewed as a whole. For example, many if not most ordinary clearing bank customers probably think they own the money in their bank deposit accounts, whereas the standard terms of a clearing bank's contract with its customer

creates only personal rather than proprietary rights in relation to such accounts. Such depositors are merely unsecured creditors, not beneficiaries under a trust.

274. In my judgment the basis upon which LBIE acquired and dealt with securities for its affiliates' accounts prior to the implementation of Rascals, as reflected in the global settlement practice which I have described, was not such as to give the affiliates proprietary interests in the underlying securities. My reasons follow.

275. First and foremost, while those arrangements included an obligation upon LBIE to account in relation to its holding of the underlying securities, both for any proceeds of sale and for any intermediate income, they imposed upon LBIE none of the characteristic obligations of a trustee in relation to those securities. On the contrary, they clearly disapplied such obligations. Thus LBIE was free to mix the securities with its own, to dispose of them by way of street lending on terms which permitted LBIE to enjoy the consequential funding benefits of the cash received in lieu, without accounting to the affiliates, and to use the securities of one affiliate to make good short positions both for other affiliates and for LBIE itself. In short, LBIE was free to use securities held in its house depot accounts generally for the purposes of its cash flow and more generally for its business, albeit that its business included agency and brokerage activities for its affiliates. LBIE was under no obligation to maintain sufficient securities in its house depot accounts to match the aggregate of its affiliates' book entitlements. On the contrary, it simply managed its house depot accounts so as to be able to settle disposals of securities held for its affiliates' books, as and when instructed to do so. In all those respects, LBIE's permitted conduct in relation to its house depot accounts much more closely resembles that of a banker in relation to customers' deposits than a trustee in relation to its beneficiaries' property.

276. Secondly, the conferral upon the affiliates of a proprietary interest in the underlying securities was not necessary for the achievement of the commercial objectives of the parties. The affiliates' objective was to enjoy the economic fruits of ownership, namely the rises and falls in the value of the security, and its intermediate income, either as an investment in its own right, or as a hedge against the risks of derivatives transactions which formed the main business, for example, of LBF and LBSF. Those fruits could be fully enjoyed as the result of LBIE's personal obligation to account, both for the proceeds of the on-sale of the securities to the street, and for the intermediate income, at least for as long as LBIE remained solvent, and therefore able to discharge its personal obligations.

277. The affiliates had no need to obtain any form of title to the underlying securities. They were settled into LBIE's name and re-sold in LBIE's name. For all purposes connected with the street, LBIE's title was a sufficient means of enabling the affiliates to realise their economic interests in the capital and income value of the securities.

278. Nor did the affiliates, as associated companies in the same group, have cause to rely upon a proprietary interest as a protection against the risk of LBIE's insolvency, as they might have had if choosing a wholly independent broker or settlement agent for their dealings in securities. Furthermore, LBIE's liberty to use the underlying securities in connection with its own business, and in particular by lending them to the street, meant that the arrangements gave the affiliates no real protection against LBIE's insolvency in any event.

279. A useful demonstration of the fact that the affiliates' commercial purposes in connection with the securities did not require the conferral upon them of a proprietary interest is to be found in the fact that the Rascals processes, later superimposed upon the global settlement practice, had as their main object the conferral of absolute title on LBIE, to the exclusion of the affiliates, for the whole of the period during which LBIE held the underlying securities for the affiliates' account. No-one appears to have considered that the superimposition of Rascals processes in any way detracted from the achievement of the commercial purposes for which the affiliates used LBIE as their broker or settlement agent.

280. In reaching my conclusion that, prior to the implementation of Rascals, the operation of the global settlement practice between LBIE and its affiliates did not confer upon the affiliates a proprietary interest in the underlying securities, I have not ignored the factors relied upon by the respondents for the contrary argument. I will briefly address the main factors relied in turn.

281. First, I have already acknowledged that LBIE's status as the affiliates' agent or broker is a pointer in the opposite direction, but only a starting point. Secondly, the respondents placed much emphasis on the routine inclusion of the underlying securities in the affiliates' stock inventories. At first sight this is indeed another pointer towards a conclusion that the beneficial interest in the underlying securities lay with the affiliates rather than with LBIE.

282. On closer analysis however, this factor carries no real weight as evidence of any common assumption or intention about beneficial title. I have already described how the underlying securities came to be included in the affiliates' stock inventories upon the trade date rather than the settlement date, and how they remained in those stock inventories during the whole of the period when the underlying securities were the subject of Rascals processes, whether by repo or stock loan. Similarly, they were removed from the affiliates' stock inventories upon the trade date of a re-sale of the underlying security, rather than upon the settlement date. Thus, the underlying securities appeared in the affiliates' stock inventories before they (or for that matter LBIE itself) could have acquired any proprietary interest in them, since the earliest date for the passing of title from the street is the settlement date rather than the trade date. Equally, they remained in the stock inventories at a time when it was commonly assumed that the Rascals processes conferred absolute title on LBIE. Finally, they were removed from the stock inventories before the affiliates (on their case) lost their proprietary interest, which only occurred on the settlement of the re-sale to the street.

283. Mr Bolland's written evidence was that the significance of the entry of a security in an affiliate's stock inventory was a recognition that, during the period when it was so recorded, the affiliate was entitled to the economic risks and returns of the securities position, rather than necessarily to a proprietary interest in the underlying security. This was confirmed by Mr Dominic Gibb, the Lehman Brothers European Financial Controller at the time of the collapse, and he said that this approach to the accounting treatment of securities positions was consistent with his understanding of UK GAAP. Mr Gibb was cross-examined on this evidence by Mr Brindle, by reference to paragraph 14 of FRS26, which provides that:

> "An entity shall recognise a financial asset or a financial liability on its balance sheet when, and only when, the entity

> becomes a party to the contractual provisions of the instrument."

Mr Gibb was prepared to acknowledge in cross-examination that the phrase "party to the contractual provisions of the instrument" was generally equivalent to ownership of it, but not always.

284. Mr Brindle directed my attention to provisions of FRS26 which specifically explained why, during the currency of a repo or stock loan, the on-leg seller or stock lender continues to record the underlying security on its balance sheet, the explanation being that it continues to retain substantially all the risks and rewards of ownership.

285. In my judgment, taking this evidence as a whole, while an affiliate's inclusion of the underlying security in its stock inventory (and therefore as an asset in its balance sheet) is certainly consistent with beneficial ownership, it is equally consistent with personal rights securing to it the economic fruits, risks and rewards of ownership, in the absence of any conferral of a proprietary interest.

286. A more specific case was advanced on behalf of LBF, based upon its inclusion of the underlying securities in a stock register required to be maintained by Swiss stamp tax legislation. LBF was a Swiss securities dealer for stamp tax purposes, and stamp tax was chargeable on any transfer of ownership in taxable securities for consideration in circumstances where a Swiss securities dealer acted as a counterparty or intermediary in respect of such a transfer, and no exemption arises. In fact, LBF enjoyed the hugely valuable benefit of a stamp tax exemption in respect of securities required for hedging purposes, but it was nonetheless under a continuing obligation to record and report such acquisitions for stamp tax purposes.

287. LBF routinely recorded and reported its purported acquisition of the underlying securities acquired by LBIE for its book under the global settlement practice. As with the affiliates' stock inventories, LBF did not record a disposal of the underlying securities when title to them was purportedly transferred to LBIE under the Rascals processes. No-one suggested that LBF's leaving the underlying securities on its stock register while Rascalled arose from some perception at the time that the Rascals processes were ineffective for the purposes of passing absolute title to LBIE.

288. There was some rather inconclusive evidence (not all of which was subjected to cross-examination) about whether there was a tendency in Switzerland to over-report stock acquisitions subject to the stamp duty exemption. For present purposes, I am prepared to assume that Mr Eric Fiechter, a Swiss lawyer and non-executive director of LBF, believed that, for Swiss law and stamp tax purposes, the acquisition by LBIE of securities for LBF's books was to be treated as an acquisition by LBF. The question for decision however is whether in English law LBIE's acquisition conferred a proprietary interest on LBF. On that question it seems to me that Mr Fiechter's perception of the Swiss legal and fiscal consequences of the arrangements is of limited persuasive force.

289. Attempts were made by various of the respondents to rely upon the terms of the Master Custody Agreements in force from time to time between LBIE and the affiliates. In my judgment, for the reasons already given in relation to each respondent between which and LBIE there existed a MCA, those agreements are

simply inapplicable to LBIE's holding of securities for the affiliates' books in un-segregated house depot accounts. LBIE's making of those agreements with LBF and LBSF is, as I have already explained, probably attributable to the fact that, from time to time, derivatives counterparties in transactions with those affiliates occasionally lodged securities rather than cash by way of collateral, and those affiliates then used LBIE's segregated accounts for keeping those securities in custody. As for LBCCA, it had clients whose securities were deposited with LBIE.

290. For LBI, Mr Brindle placed reliance upon the language of both the 1994 and 1996 versions of the UCCBSA which, in various places, described LBIE as holding securities for LBI "as custodian". As a matter of language this affords some support to LBI's case for a proprietary interest, but it is by no means sufficient to displace the considerations which, as much for LBI as for the other affiliates, militate the other way. While the UCCBSA is to be construed in accordance with New York law principles of interpretation, the small differences in those principles, by comparison with English law, afford no basis for attributing some more powerful consequence to the use of the word "custody" in what is, by common consent, otherwise an entirely English law analysis of the nature of the relationship between LBIE and LBI, and the consequences of that relationship in terms of the creation of a trustee beneficiary relationship between LBIE and LBI. Furthermore the UCCBSA did not in general terms require segregation of securities or money held by LBIE in custody for LBI, save in relation to long positions held indirectly for LBI's customers.

291. LBSF advanced no particular arguments of its own on this issue, the underlying facts about its relationship with LBIE being for these purposes substantially the same as between LBIE and LBF.

292. Mr Dicker's submissions for LBCCA in relation to the pre-Rascals period focused, as I have already described, upon the thinness of the evidence about the operation of the global settlements practice, by comparison with the much more detailed evidence in relation to the later period. It was a submission equally available to all the affiliates, rather than one based on special facts applicable to the LBIE/LBCCA relationship viewed separately. While there is force in Mr Dicker's submission that LBIE's policy to lend to the street as much of the securities in its house depot accounts as possible was intensified during rather than before the implementation of Rascals, I have not been persuaded (for the reasons already given) that LBIE's liberty to use such securities for street lending during the pre-Rascals period was subject to any significant restrictions, as between itself and either LBCCA or any other of the respondent affiliates.

293. I am conscious that I have in relation to the pre-Rascals period reached a conclusion on the question of proprietary interest which is the opposite to that which I reached in relation to the similar question arising from the terms and operation of the IPBA(Charge) in the RAB Market Cycles case, notwithstanding that the IPBA permitted LBIE a right of use (which I described as a right to swap) in relation to the underlying securities. That right of use was the main contra-indication to the existence of a beneficial interest of LBIE's clients in the underlying securities, but there were powerful factors pointing towards a trustee beneficiary relationship in that case, which are absent from the present analysis. In particular, the language of the IPBA included not merely references to custody, but also to the securities as "belonging to the Counterparty" and that they "do not belong to the Prime Broker".

The IPBA required the client's securities to be segregated, and permitted mixing with LBIE's property only in exceptional circumstances. Furthermore, the right of use was hedged about by obligations to replace securities thus used with equivalent securities, hence my description of it as a right to swap, whereas in the present case, LBIE's consensual use of securities held in its house depot account appears to have been subject to no significant restrictions of any kind.

294. I am therefore satisfied that there is no inconsistency between my conclusion in the present case that, prior to the application of Rascals, no trustee beneficiary relationship existed between LBIE and the affiliates, and my contrary conclusion in relation to the IPBA (Charge). At the end of the day, a line has to be drawn somewhere. I am satisfied that it lies between those two different structures.

<u>The Period After The Implementation Of Rascals</u>

295. LBIE's use of securities held for the account of its affiliates did not become any more trustee-like after the introduction of Rascals, at least in relation to Rascalled securities. On the contrary, as already explained, the policy by which such securities were to be put to use by lending to the street for the improvement of LBIE's cash-flow intensified after Rascals was introduced. Furthermore, the Rascals processes were specifically designed and intended to justify that use, both in terms of avoiding any regulatory requirement to segregate, and in terms of ensuring (albeit in my judgment unnecessarily) that LBIE had good title to lend securities to the street.

296. Nonetheless, the interposition of the Rascals processes between the acquisition of securities for the account of affiliates and their use in street lending necessarily acquires a complete re-analysis of the factors for and against the recognition of a trustee beneficiary relationship during the (largely theoretical) period between acquisition and Rascalling.

297. At the heart of any repo or stock loan is a mutual assumption that, prior to its taking effect, the on-leg seller or stock lender (as the case may be) has some form of proprietary interest in the underlying security. In short, it must have property to sell or to lend, if the repo or stock loan is not to be meaningless. This must be all the more the case in relation to repos or stock loans which (as they invariably did as between LBIE and its affiliates) in terms preserve for the seller/lender the economic fruits, risks and benefits of the underlying security throughout the period of the repo or stock loan. If those economic fruits, risks and benefits are not transferred, and no property interest is transferred either, the repo or stock loan is denuded of any operative effect.

298. For the purpose of the objective ascertainment of the parties' mutual intention, it must be supposed that they considered that the repos and stock loans were effective, even if, as alleged, they may in fact have been defective for one or more technical reasons. I exclude from that analysis the Automatic Rascalling of securities acquired for the book of LBCCA, where its case is not merely that the repos were technically ineffective, but that they were made by LBIE with the wrong affiliate, leaving LBCCA entirely unaffected by them. I will return later to the issue whether LBCCA's case in that regard is made out.

299. It is in my judgment entirely artificial, and therefore misleading, to appraise the parties' mutual intention as at the moment of acquisition of a security for the affiliate's book without regard to the fact that, in accordance with well established procedures, the underlying security was either immediately thereafter to be Automatically Rascalled, or eligible for Manual Rascalling because of its suitability for street lending. In relation to securities eligible for Automatic Rascals, the entirely automated procedures in place by 2006 left no room for uncertainty, as at the moment of acquisition, whether such securities would be Rascalled. Their subjection to an immediate repo on the settlement date was an entirely automated process calling for no human intervention of any kind.

300. The position in relation to Manual Rascals is less straightforward, both because the process was discretionary, depending upon the decision of a member of LBIE's trading team, and because the stock loan did not always immediately follow the settlement of the acquisition from the street. Nonetheless, the understanding upon which Manual Rascals was based was, as I have already described, designed to ensure that before any specific security was lent to the street by LBIE, it would be made the subject of a stock loan from the relevant affiliate, if it had not already been Automatically Rascalled.

301. Two important consequences flow from that analysis. The first is that, as all the respondents submitted, the mutual understanding and intention of the parties in relation to any security eligible for Automatic or Manual Rascals must have been that, to enable the Rascals process to take effect, the basis upon which its acquisition from the street had been settled by LBIE was such as to confer some form of proprietary interest on the affiliate. The second consequence is that the use, subsequent to Rascalling, of the underlying security by LBIE for the furtherance of its own business (whether by street lending, settling short positions or otherwise) is no longer a significant factor in the objective ascertainment of the parties' intention as to beneficial ownership on acquisition. On the contrary, as Mr Dicker cogently submitted, LBIE's subsequent conduct in relation to the underlying Rascalled securities is entirely attributable to the mutual intention that the repos and stock loans between LBIE and the affiliate (rather than the acquisition itself) should confer upon LBIE absolute title, free from any competing proprietary interest in the affiliate.

302. Mr Milligan's response to these two submissions was his often repeated refrain that, in reality, the Rascals processes were just a form of belt and braces, designed merely to resolve some doubt about whether LBIE acquired, and thereafter retained, absolute title on acquisition. Mr Milligan sought to buttress that submission by reference to the recitals to the standard form ICRA and MPRA, which do indeed make some reference to the avoidance of doubt.

303. I have not been persuaded by this submission. The evidence shows that the prevailing assumption within the Group was that LBIE's acquisition of securities for the account of an affiliate conferred a proprietary right on the affiliate, the only uncertainty being whether that right was (in accordance with normal practice between parties at arm's length) postponed until the receipt of payment. Secondly, none of the agreements between LBIE and the affiliates pursuant to which Rascals was implemented, still less the industry standard form repos and stock loans utilised for that purpose, disclose any uncertainty as to the existence of a proprietary interest in the affiliate. On the contrary, the presumed existence of such an interest is the essential basis for all those

transactions. Thirdly, the reference in the recitals to the standard form ICRA and MPRA is to the avoidance of doubt about whether LBIE and its affiliates were adhering to capital adequacy and other regulatory requirements, rather than to a doubt as to whether, apart from Rascals, the affiliates had proprietary interests in the underlying securities.

304. Even if there may have been differing views about that question within the Group prior to 1996, the implementation of the Rascals processes by the use of repos and stock loans simply demonstrates in my judgment that those who assumed that the affiliates did acquire proprietary interests upon settlement of acquisitions from the street prevailed, and that it is their intention and understanding, rather than any different understanding of those who thought otherwise, that must be taken as governing the parties' mutual intention during the period after 1996, when Rascals was being implemented.

305. It is nothing to the point that I have concluded that prior to the implementation of Rascals, the prevailing understanding within the Group was, as a matter of English law, wrong, so that for any purpose connected with a need to ensure that LBIE had absolute title to the underlying securities, the Rascals processes were unnecessary. The parties' decision to implement those processes has the two consequences which I have just described, and for which the respondents have contended.

306. It follows in my judgment that the introduction of the Rascals processes as an important element in the terms governing LBIE's acquisition of eligible securities for its affiliates' accounts not only compels a re-evaluation of the question whether the affiliates thereby obtained a proprietary interest on acquisition, but also a conclusion, contrary to that which I have reached in relation to the pre-Rascals period, that they indeed did acquire such an interest. By eligible securities I mean, of course, securities eligible either for Automatic or Manual Rascals. It is an entirely different question, as to which I express no view one way or the other, whether the acquisition of securities which were ineligible for Rascals processing (whether because they were issued by a Lehman group company, inappropriate for lending to the street, or for any other reason) gave rise to any similar proprietary interest. Not only were such securities not Rascalled, but they were, ex hypothesi, unlikely to be subjected to street lending or other uses essentially inconsistent with the existence of a trust in relation to them. In any event, such securities are not the subject matter of this application and there has been no satisfactory evidence about how securities of that type were dealt with by LBIE after acquisition.

307. I have considered whether the mutual intention (which was a pre-requisite of the Rascalling of eligible securities) that the affiliates should first acquire some proprietary interest in them ought to be regarded as a conditional intention, the condition being the effectiveness of the relevant Rascals repo or stock loan as a means of the transfer of title back to LBIE. In my judgment I should not so conclude. Nothing in the way in which LBIE and the affiliates dealt with the Rascals processing of eligible securities after 1996 suggests any doubt in the corporate minds of the parties as to the effectiveness of the repos and stock loans for the purpose of clothing LBIE with absolute title. The challenges to the effectiveness of the Rascals transactions with which I have to deal emerged entirely after the collapse, when the structures came to be subjected to the critical analysis of the various affiliates' office-holders and their legal advisers.

308. To that general conclusion there are two potential exceptions. The first is LBCCA, in relation to Automatic Rascals to which, on the face of the documents at least, it was not a party. Mr Dicker had no cogent answer to the proposition that LBCCA could hardly, at one and the same time, rely upon the intended Rascalling of eligible securities as a critical factor in the beneficial interest analysis, while repudiating any involvement in that process.

309. The second more complicated exception relates to LBI. It will be recalled that the capital adequacy problem arising from LBIE's acquisition of securities for the account of affiliates had no real application as between LBIE and LBI, because of the process of regular pay-downs of inter-company indebtedness which followed within a day or two of any relevant acquisition. LBIE was simply not for any significant period an unsecured creditor of LBI in relation to the aggregate cost of such acquisitions. It may be for that reason that Automatic Rascals was never applied as between LBIE and LBI.

310. There was nonetheless some stock lending between LBIE and LBI, but it is by no means clear that this took place as part of any conscious application of Rascals processing, rather than merely on a sporadic basis, as and when LBIE wished to lend to the street a security acquired for LBI's book. As between LBIE and LBI this case is in fact concerned only with some thirteen securities still held in a LBIE depot which were the subject of stock loans at the time of the collapse. All other issues between LBIE and LBI in relation to securities acquired for its book remain to be resolved on some future occasion.

311. The second complication arises from the terms of clauses 8.4 and following of the UCCBSA (quoted above) which appeared for the first time in its November 1996 version. These provided, in relation to securities not paid for on acquisition, (i) that LBIE should "be deemed to have stepped in as principal at point of settlement", (ii) that until paid for, LBIE should have the unfettered right to use the securities as it saw fit, subject to maintaining a separate account of those transactions, and (iii) that upon default LBIE should have the right to realise all securities held pursuant to clause 8.4 and to apply the proceeds of sale to exclude any balance on that separate account.

312. Considerable time and effort both by counsel and by LBI's expert were devoted to the question whether, in relation to securities not paid for by LBI, clause 8.4 and following deprived LBI of any proprietary interest which it might otherwise have had in those securities. That dispute included a debate about whether LBI's expert's opinion about what a New York court would conclude that clauses 8.4 and following actually meant was even admissible in this court, a debate which, had it been necessary to do so, I would have resolved against LBI.

313. But in my judgment it is neither necessary nor appropriate for me to address the issues arising from the interpretation of clauses 8.4 and following of the UCCBSA (1996 version) on this application. It is unnecessary because, so far as I have been able to ascertain, there is no basis for concluding that, by the time of the collapse, the acquisition of those securities which had by then been subjected to stock loans had not been paid for by LBI to LBIE under the regular pay-down process which I have described. The only difficult issue in relation to the thirteen relevant securities is whether LBIE had ever paid the collateral in respect of ten of the thirteen, and if not, whether LBIE could rely on a passing of absolute title from LBI to it under the

relevant stock loans. For present purposes, the necessary common assumption that, immediately prior to those stock loans, LBI had a proprietary interest thereby to confer upon LBIE is sufficient to justify an affirmative answer to the question whether LBI had such a proprietary interest, even if for reasons which have not been explained, LBIE never thereafter paid the collateral.

314. Whatever the precise meaning of Clause 8.4 and following of the UCCBSA, Mr Brindle submitted that they showed that, if and when LBI did pay for LBIE's acquisition of securities for its book, LBI was intended to have a proprietary interest in them, regardless whether they were Rascalled, or even eligible for Rascalling. I recognise the force of that, but if LBIE continued to use and manage all such securities in the same way as it had before the introduction of Rascals (i.e. whether or not Rascalled), I would not regard the terms of the 1996 UCCBSA as sufficient to override the considerations which have led me to conclude that no proprietary interest was intended or in fact created. The difficulty in relation to LBI is that, since this Application has not been about non-Rascalled securities, the evidence does not show whether in fact LBIE did continue to use LBI's securities in the same non-trustee-like manner after 1995. That evidential lacuna makes it inappropriate that I should resolve that question now.

Conclusion

315. I can therefore conclude the difficult analysis of the first main issue between the parties as follows. Prior to the implementation of Rascals, the terms upon which LBIE acquired securities and thereafter held them in its un-segregated house depot accounts for the books of affiliates did not give rise to a proprietary interest in favour of the affiliate, but only to personal rights. Secondly, following the implementation of the Rascals processes, the acquisition of securities eligible to be Rascalled, and which were then purportedly Rascalled, including therefore all the securities the subject matter of this application, did give rise to a beneficial interest in the affiliates immediately prior to being Rascalled, regardless of the effectiveness or otherwise of the Rascals transactions in conferring absolute title on LBIE. To that second conclusion there is the exception in relation to LBCCA, to which I shall return. Furthermore it applies to LBI only in relation to the subject matter of the 13 stock loans open as at the date of the collapse.

B. DOES THE RASCALS PROCESSING OF THE RELEVANT SECURITIES MEAN THAT LBIE NOW HOLDS ABSOLUTE (INCLUDING BENEFICIAL) TITLE TO THE RASCALLED SECURITIES REMAINING IN ITS DEPOTS?

316. The number and variety of competing arguments which arise in this part of the case, together with the factual differences affecting LBIE's relationship with each of the respondents, make the presentation of my analysis and conclusions on this question a complicated task in itself. For the most part I have no alternative but to consider the case in relation to each respondent separately (albeit treating LBCCA and LBAH as a single group) and to address Automatic Rascals separately from Manual Rascals. It is for the most part also necessary to consider the effect of on-legs separately from the effect of off-legs, both in relation to repos and stock loans. In addition to questions of interpretation, the parties' submissions also raise issues of performance, waiver and estoppel by convention, as well as an alleged resulting trust of the type first identified in Barclays Bank Limited v. Quistclose Investments Limited [1970] AC 567.

317. It is convenient however to begin by mentioning certain points of common ground, and by resolving one point which was common ground save for one dissentient party.

318. First, it was common ground that, subject to any issue as to compliance with a condition precedent, the on-leg of each repo and stock loan was effective to transfer any proprietary interest of the relevant affiliate to LBIE. By relevant affiliate I mean the affiliate which was party to the relevant repo or stock loan. Secondly, it became common ground during the hearing that, as a matter of contract, the passing of title under the on-leg of each repo and stock loan was conditional upon payment by LBIE of the on-leg purchase price or collateral (as the case may be). Thirdly, it was almost common ground that, as a matter of contract, the passing of title from LBIE back to the affiliate under each off-leg was also subject to the same condition as to payment. The only dissenter from that last proposition was LBF, the point being conceded by the other respondents.

319. In my judgment the concession was rightly made. I need only deal with LBF's challenge, by reference to the contractual provisions between it and LBIE. Clause 1 of the ICRA made in March 1996 provided that the re-sale and return to LBF of equivalent securities was to be:

> "Against the payment of their purchase price or return of collateral in money by Seller to Buyer."

Clause 3(c) of the standard form GMRA in force at the time of the collapse made similar provision in relation to repos, and clause 6(c) provided that:

> "Transfer of Equivalent Securities by Buyer and payment of the Repurchase Price payable by Seller against the transfer of such Equivalent Securities shall be made simultaneously."

Finally, the standard form OSLA dated 27th February 1997 (which regulated stock loans), made similar provision in clause 7(B), to the effect that repayment of the collateral was to be simultaneous with the transfer of equivalent securities to the lender. In my judgment it is clear, as between LBIE and LBF, that as a matter of contract LBIE's obligation to re-transfer title to equivalent securities, both under repos and stock loans, was conditional upon the simultaneous payment of the repurchase price or repayment of the collateral (as the case may be) by LBF. When it is borne in mind that LBIE's and LBF's books uniformly recorded LBIE as a secured creditor of LBF in relation to the repurchase prices payable and the collateral repayable under the off-legs of repos and stock loans, a conclusion that LBIE was contractually obliged to return to LBF its proprietary interest in the underlying securities otherwise than in exchange for payment would in my judgment be commercially absurd.

LBF

Automatic Rascals

The on-leg

320. It will be recalled that the Administrators' case is that LBIE paid for the on-leg of the first repo under the Automatic Rascals process by way of offset of its payment obligation against LBF's obligation to refund LBIE for its cash payment of the acquisition price of the security from the street.

321. LBF advanced the following counter-submissions, all in support of the general argument that LBIE never paid the on-leg purchase price. First, Mr Moss submitted that the accounting records were inconsistent with any automatic set-off. Secondly, he submitted that, on the true construction of the Inter-company Funding Agreement of June 2000 ("the ICFA") LBHI rather than LBF was LBIE's debtor in relation to the purchase price from the street. Mr Jones for LBSF submitted that, even if those two arguments were wrong, nonetheless in every case in which the purchase price for the on-leg of the first repo exceeded the purchase price payable to the street, then nonetheless LBIE did not pay even by offset in full, so that the condition for the passing of title on the on-leg was not satisfied. If that submission were good for LBSF, it would equally be good for LBF.

322. By way of riposte, Mr Milligan submitted that if for any of those reasons the contractual condition for the passing of title on the on-leg of the first repo was not satisfied, nonetheless LBF was estopped by convention from denying that title had passed, both on the first and every subsequent on-leg.

323. In support of his submissions both as to interpretation and estoppel, Mr Milligan submitted that I should approach those issues upon the basis of the recognition of an overriding common intention between the parties that Automatic Rascals was to bring about a vesting of absolute title to the underlying securities in LBIE for the whole of the period between the acquisition of the securities from the street and their subsequent re-sale to the street, a submission which acquired the abbreviated name of "cradle to grave". Mr Moss submitted that I should consider each successive repo as a separate transaction, with no relevance attached to its place in a series. It is convenient to address this difference of approach at the outset, since it coloured much of the detail of the parties' rival submissions.

324. I accept the broad thrust of Mr Milligan's cradle to grave analysis, for the following reasons. While it is of course necessary to look separately at each repo, for example for the purpose of understanding how it was performed and paid for (if it was), and for the purpose of understanding the structure of the stream of daily repos as a whole, nonetheless a purposive approach to the interpretation of the repos as the mode of achieving the objectives of the Automatic Rascals process leads inescapably to a conclusion that the parties' purpose was indeed to bring about a continuous vesting of absolute title to the underlying securities in LBIE, rather than a vesting of title in LBIE between (say) 7 p.m. on each working evening and (say) 2 p.m. on the afternoon of the next working day, with a vesting of beneficial title in the affiliate between 2 p.m. and 7 p.m., as Mr Moss argued.

325. That conclusion follows inevitably from an analysis of the problems for which Rascals (including Automatic Rascals) was to be a solution. None of the three problems would be solved merely by arrangements which left LBIE as the absolute owner of the underlying securities for part, rather than the whole, of each day. Thus, Article 4 of the Capital Adequacy Directive (Council Directive 93/6/EEC) clearly required the prescribed level of adequacy to be maintained at all times, and it is clear from correspondence between the Security and Futures Authority and the Group in relation to the Capital Adequacy Directive in December 1995 that this was well understood within the Group. Similarly, the avoidance of a requirement to segregate, and the assurance of good title to lend the underlying securities to the street both required that LBIE be continuously, rather than intermittently, the absolute owner of the underlying securities. In particular, LBIE did not confine the street lending of securities subjected to Automatic Rascals rigidly to one day repos.

326. Finally, the reason for the use of a stream of successive one day repos in the Automatic Rascals process had nothing to do with creating intermittent title in LBIE. Its purpose was to provide a mechanism whereby the amount of the secured loan from time to time was constantly adjusted so as to be equivalent with the marked to market value of the stock held by LBIE as security. In that respect the constant repetition of daily repos under Automatic Rascals had the same margining effect as the provisions for adjustment of collateral in the open-ended stock loans used under Manual Rascals.

327. Mr Moss's best point was that the evidence did show (albeit by reference to specific examples rather than a comprehensive survey) that there could be a gap of some hours between the processing of the off-leg of one repo and the on-leg of the next repo on any particular day, and the consequential accounting entries did, if read literally, appear to substitute the secured debt owed to LBIE for an unsecured debt on settlement of the off-leg, followed by a new secured debt of the adjusted marked to market amount on the settlement, later in the day, of the next on-leg. There was on the face of it a period each day when, according to the parties' records, no repo on-leg was in place.

328. The cradle to grave submission is however concerned not with continuity of contracts but with continuity of absolute title. I have decided, contrary to Mr Moss's submission, that the passing of title back to an affiliate pursuant to the off-leg of a repo was conditional upon simultaneous payment of the repurchase price. The intention behind the Automatic Rascals structure was, as I have already described, that the off-leg repurchase price would be largely offset against the next on-leg purchase price payable by LBIE. Thus in the example of an off-leg booked as settled at 2 p.m. and a following on-leg booked as settled at 7 p.m. on the same day, title under the off-leg would pass back to the affiliate only upon settlement of the on-leg, whereupon it would pass immediately back to LBIE. In abstract theory there might, as Mr Backhouse graphically described it, be a split second while title lay with the affiliate on its way round the circle which started and finished with LBIE, but the interpretation of commercial documents is no more to be affected by such split seconds as the analysis of a mortgage transaction is to be based upon the supposed *scintilla temporis* between the purchaser's acquisition of the legal estate, and his charge to the lender: see <u>Abbey National v. Cann</u> [1991] 1 AC 56, at 93, per Lord Oliver.

329. Returning to the respondents' main submissions in support of the supposed ineffectiveness of the repo on-legs, there is in my judgment nothing of substance in the distinction between offset and set-off for the purposes of deciding whether LBIE paid for the first on-leg after settlement of an acquisition from the street. It is true that in the unsecured inter-company account between LBIE and LBF the offsetting entries of LBF's debt to LBIE (for the street acquisition price) and LBIE's debt to LBF (for the first on-leg) are merely recorded as successive entries, with no immediate journal extinguishing them as against each other. But that comes nowhere near displacing a conclusion that the parties intended that the offsetting of those two obligations should have the effect, *pro tanto*, of paying both debts. Where in a single account two parties record successive mutual credits and debits there is in reality only a net debt owing, one way or the other between them, at any particular moment in time: see Wood on English and International Set-Off at paragraph 3-3. This normal conclusion may of course be displaced by a contrary intention where for some reason the parties wished to preserve the opposing debts, but in the present case the evidence as to intention is all one way. Witness after witness agreed with Mr Moss in cross-examination that payment under the repo structure of Automatic Rascals was to be by book entry rather than by cash. A book entry which merely records an unpaid debt pays nothing. But book entries which record offsetting debts and credits sufficiently evidence payment if, but only if, there is an offsetting credit available for that purpose.

330. I am no more impressed by Mr Jones' submission that, in cases where the repo on-leg price was greater than the acquisition price from the street, the condition for the passing of title was not satisfied in full, and therefore, not at all. The parties must be taken to have understood when setting up the Automatic Rascals process that increases in the value of the underlying security between the trade date of its acquisition from the street and the date of the first repo would lead to small deficiencies in payment of the on-leg purchase price, which would then fall to be settled as unsecured liabilities at the next monthly netting and novation process, as between LBIE, LBF and LBHI. It is inconceivable that the parties can have intended the efficacy of a repo on-leg in passing absolute title from the affiliate to LBIE to depend upon whether the on-leg purchase price was slightly greater, equal to or slightly less than the acquisition price from the street. The answer that an available but slightly smaller offset was sufficient to discharge the simultaneous payment condition for passing of title on the on-leg may be arrived at either, as a matter of interpretation, by a vigorous application of the principle *verba ita sunt intelligenda ut res magis valeat quam pereat* or on the basis that any consequential non-compliance with the strict terms as to passing of title was simply waived by the affiliate.

331. The main plank in Mr Moss's case that title did not pass to LBIE on the first on-leg, enthusiastically supported by both Mr Dicker and Mr Jones, was that LBIE had no available offsetting receivable due from LBF, because of the terms of the ICFA. By clause 1 LBHI agreed to provide funding to LBF and to permit LBF to provide funds to LBIE to effect settlement transactions on behalf of LBF. LBIE was to hold funds provided by LBF on deposit for LBF and requested by LBF from time to time. Clause 1 concluded that, for the avoidance of doubt "any loans under this agreement are provided directly from LBHI to LBF and at no time will LBIE be regarded as lending to LBF".

332. LBF's case was that whenever an acquisition by LBIE from the street for LBF's book settled (as it always did) without LBF paying cash, the acquisition was for the purposes of clause 1 of the ICFA to be treated as funded by LBHI rather than by unsecured lending by LBIE to LBF. Mr Moss submitted that the final sentence of clause 1 (quoted above) was a deeming provision that ought to prevail over any apparent accounting entries to the contrary, and Mr Jones bolstered that argument by reference back to an earlier version of the ICFA between LBIE and LBSF (but with LBH plc rather than LBHI) which contained express words requiring a disregard of accounting entries to the contrary. I was treated by Mr Jones and Mr Milligan to an erudite analysis of the authorities relating to the question whether words in an earlier agreement omitted from a later agreement are or are not to be implied. If it had been necessary to do so I would have concluded that it was not safe to assume that such an implication was intended by way of carry-over into the later ICFA between LBIE and LBSF, not least because of the change in parties and the introduction of Rascals between the dates of the two agreements. Nonetheless I consider that Mr Moss is correct in his submission that the final sentence of clause 1 of the ICFA between LBIE and LBF is a deeming provision which, to the extent that it applies for present purposes, would override accounting entries to the contrary.

333. I have not however been persuaded that clause 1 of the ICFA has any application to the acquisition from the street of securities which were then subjected to Automatic Rascals. In my judgment, such an acquisition did not require funding from LBF at all, still less from LBHI in substitution for LBF. The acquisition was in substance self-funded by LBIE, since it used LBF's unsecured obligation to pay for the acquisition price from the street as an offset against its obligation to pay the purchase price under the first repo on-leg. The secured debt from LBF to LBIE which arose under the first repo did not represent funding for the acquisition of the security from the street, but LBF's off-leg purchase price obligation.

334. All that LBF can be said to have funded in relation to an acquisition from the street was the amount (if any) by which the acquisition price exceeded the first repo on-leg price. This was indeed retained initially as an unsecured debt to LBIE on inter-company account and, in due course, novated to LBHI at the month end so that it became thereafter funded by LBHI rather than LBF. To that very limited extent clause 1 of the ICFA may have had some application to the acquisition from the street of Automatically Rascalled securities, as indeed the accounting entries show, albeit only at the month end. But by definition that amount, even if deemed immediately to be owing to LBIE by LBHI rather than LBF forms no part of the offset used by LBIE as the means of its payment for the on-leg.

335. Nor is there anything in the notion that LBF funded the acquisition from the street during such brief period on the settlement date as may have elapsed between settlement of the acquisition from the street, and the taking effect of the first repo on-leg. For the purposes of answering the question "did LBF or LBHI have to fund the acquisition?" that is no more than another *scintilla temporis*.

336. It well may be that clause 1 of the ICFA had a more substantial operation in relation to acquisitions of securities by LBIE for LBF's book which were not then Rascalled at all. But such acquisitions fall outside the scope of this application and I say no more about them.

337. Mr Moss and counsel for the other respondents concerned with Automatic Rascals sought to bolster their submissions about the ICFA by pointing to the undoubted fact that, as the Group's central banker and treasury, LBHI provided cash on a daily basis to LBIE, to the extent necessary for its immediate needs. Furthermore the inter-company position between LBIE and LBHI was as a matter of policy maintained on a basis designed to ensure that LBHI was always LBIE's creditor, rather than the other way round. For that purpose a prudential minimum of US$1 billion of net debt owed by LBIE to LBHI was sought to be maintained. Furthermore, at least during the period immediately prior to the collapse, surplus cash in LBIE's house accounts at the end of a business day was routinely swept up and transferred to LBHI, with a fresh cash float being transferred back to LBIE at the beginning of the following day.

338. In my judgment this aspect of the Group's treasury and cash management system says nothing about the applicability of clause 1 of the ICFA to the acquisition from the street of Automatically Rascalled securities. The Group's accounting records uniformly show that at no time did LBHI treat as part of its inter-company position with LBIE any part of the acquisition price of securities from the street for LBF's book other than such occasional unsecured balances as arose from transactions where the acquisition price from the street exceeded the on-leg price of the first repo. The volume of business between LBIE and LBF, *a fortiori* if aggregated with the volume of similar business between LBIE and LBSF, and between LBIE and LBAH/LBCCA, was frequently so great that, if the full acquisition prices had been included, the amounts of unsecured indebtedness of LBHI to LBIE would substantially have overtopped the US$1 billion minimum LBIE debt, so as to render LBHI from time to time a net debtor to LBIE. It cannot have been the intention of any of the parties to the ICFA that clause 1 should by a deeming provision have that destructive effect upon a major policy objective in relation to inter-company balances between LBHI and LBIE.

339. For those reasons the challenge to the effectiveness of the first repo on-legs based upon the ICFA fails. In my judgment the uniform effect of the first repos in relation to the Automatic Rascalling of securities acquired by LBIE for LBF's book was, as plainly intended, to transfer to LBIE any proprietary interest of LBF in the underlying securities.

<u>The First Off-Leg And Subsequent Repos</u>

340. The above analysis of the effect of the first repo on-leg shows that, at the beginning of the business day following the settlement of the acquisition from the street, LBIE was indeed a secured creditor of LBF in respect of the off-leg repurchase price falling due later that day, because LBIE had acquired absolute title to the underlying security under the first repo by paying the on-leg purchase price by offset. The result is, as I have also described, that since LBF never paid an off-leg repurchase price in cash but only by way of offset against LBIE's next on-leg purchase price obligation, title passed back to LBF, if at all, only for a nanosecond on its way round a circle which started and finished with LBIE, when the next repo on-leg settled.

341. The same analysis holds good for every subsequent daily repo. The "cradle to grave" objective of conferring absolute title to the underlying security to LBIE on a continuous basis between the acquisition from the street and its subsequent resale to the street was thereby achieved.

342. It is therefore strictly unnecessary for me to address Mr Milligan's alternative submissions based upon estoppel by convention. Mindful however that this case will probably be appealed, and of the risk that a higher court may take a different view of the complicated issues of interpretation and analysis thus far, I shall briefly address the estoppel submission, on the hypothetical basis that I had concluded that the repo on-legs were ineffective to transfer LBSF's proprietary interest in the underlying securities to LBIE, as a matter of contract.

343. An estoppel by convention may arise where parties to a transaction act on an assumed state of facts or law, the assumption being either shared by them both or made by one and acquiesced in by the other. The effect of an estoppel by convention is to preclude a party from denying the assumed facts or law if it would be unjust to go back on the assumption. See Republic of India v. India Steamship Co Ltd (No 2) [1998] AC 878 at 913 E-G.

344. The circumstances in which a shared but mistaken assumption as to the meaning or effect of a prior agreement between the parties will give rise to an estoppel by convention are not straightforward: see Keen v. Holland [1984] 1 WLR 251, Hamed El Chiaty and Co v. The Thomas Cook Limited [1992] 2 Lloyd's Rep 399, CP Holdings Limited v. Dougdale (unrep) 22nd May 1998, Wilson v. Truelove [2003] EWHC 750 (Ch), PW & Co v. Milton Gate Investments Limited [2004] Ch 142 and Colchester v. Smith [1991] Ch 448. I attempted a summary of the relevant principles to be derived from Keen v. Holland and the cases commenting upon it in HMRC v. Benchdollar Limited & ors [2009] EWHC 1310 Ch, at paragraphs 41 to 52, albeit in a non-contractual context. To the extent relevant, I have applied my summary of the relevant law in paragraph 52 of that judgment to the analysis of the various alleged estoppels by convention which have arisen in the present case. For convenience I set it out below:

> "(i) It is not enough that the common assumption upon which the estoppel is based is merely understood by the parties in the same way. It must be expressly shared between them.
>
> (ii) The expression of the common assumption by the party alleged to be estopped must be such that he may properly be said to have assumed some element of responsibility for it, in the sense of conveying to the other party an understanding that he expected the other party to rely upon it.
>
> (iii) The person alleging the estoppel must in fact have relied upon the common assumption, to a sufficient extent, rather than merely upon his own independent view of the matter.
>
> (iv) That reliance must have occurred in connection with some subsequent mutual dealing between the parties.
>
> (v) Some detriment must thereby have been suffered by the person alleging the estoppel, or benefit thereby have been conferred upon the person alleged to be estopped, sufficient to

> make it unjust or unconscionable for the latter to assert the true legal (or factual) position."

345. The convention alleged by the Administrators has been variously put in written and oral submissions and in position papers, either that LBIE paid for the repo on-legs or that, in any event, the repo on-legs were effective to confer absolute title to the underlying securities on LBIE. Since the only challenge to the effectiveness of the repos for that purpose is the alleged absence of payment by LBIE for the on-legs, the two conventions amount in substance to the same thing.

346. By the time that any of the securities the subject matter of this application were acquired from the street, LBIE and LBF had for many years been engaging in a Rascals process of daily repos in relation to eligible securities of the same type. The mutual book entries resulting from those repos uniformly describe their effect as making LBIE a secured creditor of LBF in respect of the off-leg purchase prices under every repo. To LBF's knowledge (and with its acquiescence) LBIE had constructed the Automatic Rascals process in relation to those securities as a way of legitimising, from a capital adequacy, regulatory and street lending perspective, the basis upon which it carried out its acquisition, holding, and exploitation of such securities for LBF's book, and on the express basis that this necessitated the conferral upon LBIE of absolute title to the underlying securities, to the exclusion of any proprietary interest of LBF. LBIE's status as LBF's secured creditor appeared both in LBIE's and LBF's accounts, and constituted the basis upon which LBIE considered itself able properly to satisfy compliance with the capital adequacy regime introduced pursuant to the Directive. Both LBIE and LBF benefited from the conduct of the Automatic Rascals process on that basis and, in so far as it was intended thereby to confer the requisite capital adequacy upon LBIE, so did LBIE's unsecured creditors stand to benefit in the event of its insolvency. The conduct of the Automatic Rascals process on an assumption that the on-legs thereby conferred absolute title on LBIE was part of a course of dealing which both preceded and followed the acquisition of the securities which are the subject matter of this application.

347. In those circumstances I consider that the legal requirements for the establishment of an estoppel by convention are satisfied. Having for many years obtained the benefit of LBIE's acquisition from the street for securities for its book, without paying cash up front but on the assumption that LBIE became by the Rascals process a secured creditor, I consider that it would now be unconscionable for LBF to resile from that convention as to the effect of the on-legs of the Automatic Rascals repos. The requirement that the conventional understanding was sufficiently shared between LBIE and LBF, and that LBIE assumed an element of responsibility for it seem to me fully satisfied by their adoption of a mutual system of book-keeping which recorded LBIE as a secured creditor, and by LBF's acquiescence in circumstances where, but for the effective transfer of beneficial title, LBIE would have been unable to satisfy itself that it could continue to act as LBF's agent or broker in the acquisition of securities from the street, consistent with its capital adequacy and regulatory obligations.

348. Before leaving this aspect of the case I must briefly mention an alternative fall-back submission by Mr Moss as to the basis upon which the Rascals on-legs might properly be regarded as having been effective to confer upon LBIE absolute title to the underlying securities in circumstances where, contrary to my finding, it were

concluded that LBIE had not paid for the purchase price under the on-legs. Mr Moss's submission (devised as will appear, for the purpose of giving LBF a leg-up in the next stage of the analysis) was that LBF could be said to have waived the requirement for simultaneous payment as a condition for the transfer of title. On a like for like basis, Mr Moss submitted that a similar waiver should be identified in relation to the passing of title back to LBF on every off-leg. Thus the daily repos should be analysed, he said, as a series of transactions under which title passed to and fro between LBIE and LBF, but without payment ever being made one way or the other on either leg of the transaction.

349. Mr Moss's ingenious purpose for deploying that analysis was to ground a submission that, without payment of the repurchase price under the final off-legs which occurred when the Automatic Rascals was switched off a week after the collapse, LBF could recover its proprietary interest in the underlying securities without payment to LBIE.

350. I have not been persuaded that the mutual and comprehensive waiver of all payment obligations under the repo transactions is a viable analysis, for two related reasons. The first is that I cannot envisage how the parties could properly have recorded LBIE as a secured creditor for the off-leg purchase price in circumstances where, by conduct, they had established a course of dealing which included a commitment by LBIE to return LBF's interest in the underlying securities on the off-leg without ever demanding simultaneous payment. To treat the repos as conferring security upon LBIE in those circumstances would be a mere sham.

351. Secondly, that analysis would have the consequence that for part of every day during a series of automatic repos, that is the period between settlement of the off-leg and settlement of the on-leg of the next repo, beneficial title would lie in LBF rather than LBIE, so that LBIE would for that period be in breach of its capital adequacy obligations, any regulatory requirements for segregation and would (or at least as the parties feared) lack title for the lending of the underlying securities to the street. Mr Moss, with some support from Mr Dicker, submitted this mattered not if the time for measuring compliance with LBIE's capital adequacy and regulatory obligations was, on each day, at a moment when there was an on-leg in place. For the reasons which I have already given, I am wholly unpersuaded by that submission.

<u>The Final Off-Leg</u>

352. The primary case advanced on behalf of LBF (and the other respondents engaged in Automatic Rascals with LBIE) was that since LBIE never acquired absolute title under the on-legs, the consequences, if any, of the final off-legs which occurred upon the switching off of the Automatic Rascals process do not matter. I have rejected that case.

353. Nonetheless LBF advanced a number of alternative submissions as to why, even if at the moment of collapse LBIE enjoyed absolute title to Automatically Rascalled securities, it nonetheless transferred a beneficial interest back to LBF when the process was switched off. LBF's case may be summarised as being first, that this is what the final automatic book entries showed, namely that LBIE in fact transferred back beneficial title without insisting on payment by LBF. Alternatively LBF alleges that because of its letter to LBIE terminating its authority to transact on its behalf, sent on 16th September 2008, the Automatic Rascals process ended with the off-leg which

immediately followed LBIE's receipt of that letter, all subsequent repos being unauthorised. LBF advances the same case as to the consequences of the settlement of that off-leg as it does in relation to the final off-leg recorded as taking place on 23rd September.

354. For their part the Administrators submit that beneficial title did not pass back to LBF on the final off-leg for any one or more of the following reasons:

i) It was never paid for the repurchase of the securities by LBF.

ii) Equivalent securities were not appropriated by LBIE to any trust in favour of LBF.

iii) The repurchase contract constituted by the off-leg was not specifically enforceable.

iv) A proprietary remedy is excluded by the GMRA.

Those submissions would all apply equally to the off-leg on 23rd September and to the off-leg following receipt of LBF's termination letter on 16th September. Finally, the Administrators submit that, to the extent that LBF's case depends upon the off-leg recorded as occurring on the 23rd September, this was the result of an unauthorised action taken by an employee of LBIE, contrary to paragraph 64 of Schedule B1 to the Insolvency Act 1986.

355. It is convenient to begin the analysis of this final stage, as between LBIE and LBF, by a summary of the relevant facts. On 15th September 2008, when the Group collapsed, there existed on-legs in relation to all securities with which this application is now concerned, as between LBIE and LBF, for which, as I have found, LBIE had paid by offset, and pursuant to which LBIE therefore had absolute title to the underlying securities.

356. As at that date, LBIE was a secured creditor of LBF in (at least) the aggregate amount of all the off-leg repurchase prices of those repos, together with the aggregate amount of the off-leg repurchase prices of repos relating to all other Automatically Rascalled securities, most of which are no longer in LBIE's depots. As was well known to both parties and (in due course) to their office-holders, there was no prospect that LBF would be able to pay those debts, and LBIE's only effective security for payment consisted in a refusal to re-transfer to LBF any proprietary interest in equivalent securities, and a consequential right to realise such corresponding underlying securities as it held in its depots, for the benefit of its unsecured creditors.

357. Both on 16th and 23rd September, the parties' mutual computerised book-keeping system was still up and running, and recorded apparent settlements of all repo off-legs due to take place on those two dates. On both occasions the accounting system showed LBF's secured debt to LBIE as replaced by an unsecured debt. On 16th September this was immediately replaced by a secured debt for the off-leg of the new repo apparently contracted on that day. On 23rd September no reinstatement of LBIE as LBF's secured creditor occurred, so far as appears from the automatic book entries.

358. The electronic processes which led to that result on 23rd September resulted from a decision by an employee of LBIE, for which no specific authority had been obtained from the Administrators, to set all the eligibility tags for Automatic Rascals in relation to the relevant securities from eligible to ineligible. But for that switching, Automatic Rascals would have continued in relation to the underlying securities between LBIE and LBF, potentially *ad infinitum* but in reality either until the relevant computers broke down, or until the process was switched off in some other manner.

359. The electronic recording of the settlement of the final off-legs on 23rd September occurred not because of the conscious decision of an individual to waive any condition of payment by LBF, but simply because the computer programme had been set up from the outset on an assumption that, immediately after any off-leg, there would either be a new on-leg or the settlement of a sale of the underlying security to the street. It is possible to see, with the benefit of hindsight, why such accounting entries would ordinarily follow from the switching of all eligibility tags to ineligible, but I consider it most unlikely that the individual who took the decision to switch the tags either appreciated that this would be what would then occur, still less that the final automatic book entries would be used as the basis for a case that LBF rather than LBIE now has beneficial title to the surviving underlying securities. All that the evidence shows is that the decision to switch the tags was taken in the belief that this was consistent with the blanket instructions given by the Administrators on 15th September, because it prevented LBIE from entering into any new Automatic Rascals transactions with LBF.

360. In my judgment neither on 16th nor 23rd September did the repo off-legs recorded in the parties' mutual electronic records have the effect of bringing about a transfer back to LBF of any proprietary interest in the underlying securities, save only in the sense of a momentary transfer on 16th September if, but only if, the on-leg of the next repo which is recorded as having then followed was authorised by LBF.

361. At the outset, I consider it strictly unnecessary to decide, one way or the other, whether the final authorised repo had its off-leg on 16th or 23rd September. My reasons for concluding that in neither case did LBF thereby reacquire a proprietary interest (other than momentarily on 16th) are based upon an analysis of whichever of the two was the last authorised transaction between the parties. Should it matter to a higher court, I would have concluded that LBF's instruction to LBIE on 16th September was insufficient to terminate the process of daily repos, because (by contrast with transactions with the street) the computerised process by which the Rascals repos were transacted did not require LBIE to act as LBF's agent. Each transacted with the other as principal.

362. Whichever it was, it is clear that LBF did not pay LBIE the repurchase price. In my judgment LBIE did not waive compliance with that repayment obligation as a condition for the passing back to LBF of a proprietary interest in the underlying securities. On my analysis of the way in which the daily repo process operated, LBIE had on every previous occasion been paid the repurchase price by offset against its payment obligation on the next repo, and title had momentarily gone round in a circle from LBIE to LBF and then back to LBIE on settlement of that further on-leg.

363. The mere fact that a computer programme was set up on a particular assumption (namely that any off-leg would be followed by an on-leg or by a re-sale of the

underlying security to the street) does not have the consequence that, when the computer mindlessly performed the same steps in the wholly different circumstances prevailing at the moment of the settlement of the last off-leg, its mechanical recording of the book entries which I have described means that LBIE either waived its right to payment, or transferred any proprietary interest to LBF. On my analysis, on no previous occasion had title actually passed even momentarily back to LBF until payment by offset, and on the assumption that the off-legs and on-legs on any particular day were in terms of book entries separated in time, that momentary passing of title back to LBF did not occur merely because of the book entries made by the accounting computer at the moment of apparent settlement of the off-leg.

364. Even if my primary analysis were held by a higher court to be wrong, such that there was some kind of habitual waiver of payment on the off-leg, I consider it entirely wrong to infer that any such waiver also occurred on the final off-leg, in the wholly different circumstances (by comparison with all those that gone before) that:

i) there was never to be another on-leg;

ii) the securities were not being sold to the street; and

iii) LBF's insolvency meant that it was never going to pay the repurchase price in any other way.

365. It follows that I accept, as conclusive for all present purposes, the Administrators' first submission. Had it been necessary to consider the others, I would not have accepted them. While I acknowledge that the obligation of the off-leg seller under a repo is ordinarily a merely personal obligation which, because it relates only to equivalent securities, involves no trust of securities pending appropriation, the relevant fact-pattern for present purposes is that on 16th and/or 23rd September LBIE either held equivalent securities in a depot account, or held rights under repos or stock loans with the street to acquire equivalent securities which have since become identifiable by the reacquisition of such securities and their lodgement in a depot. When it is borne in mind that, from start to finish, LBF's proprietary interest consists not of an exclusive interest in any particular securities, but of a co-ownership interest in a fund, it seems to me that the reacquisition of a fund of equivalent securities constitutes a sufficient appropriation for present purposes to clothe a proprietary interest of that kind with sufficient substance to enable it to be regarded as the subject matter of a trust.

366. In my judgment Tailby v. Official Receiver is sufficient authority for there being no need for the repo off-leg to be specifically enforceable, and for a sufficient appropriation to take place in the future, by LBIE's subsequent acquisition of equivalent securities.

367. It will be apparent that I have not found it necessary to determine whether the Administrators' case that the switching off of Automatic Rascals was unauthorised is well-founded. Nonetheless I will briefly address it, against the risk that it should become material on appeal. Conceptually, it is tempting to regard a switching-off process designed to prevent new transactions occurring as both consistent with the Administrators' blanket instruction and as falling short of the exercise of a management power within the meaning of paragraphs 64(2)(a) of Schedule B1. But

that is I think to ignore the way in which the switching-off process actually operated if, contrary to my conclusion, it had the effect of releasing rather than enforcing LBIE's security for payment of LBF's debt, by actually transferring back to LBF a proprietary interest in the underlying equivalent securities. The Automatic Rascals process could have been switched off in a manner which did not have that effect, for example by making sure that the book entries did not record a settlement of the final off-legs. That might have required assistance from persons with considerable IT skill and experience, but it would not have been impossible. If the Administrators had even known of the Automatic Rascals processes during their first week in office, I consider that they could have exercised their management powers in a way which did not even appear to release LBIE's security for payment of LBF's debts. Since the switching off of Automatic Rascals was carried out in a way which interfered with the ability of the Administrators to take that course, I consider that, had it otherwise been effective to transfer a proprietary interest in the underlying securities back to LBF, it infringed paragraph 64.

368. At a very late stage in the hearing, the point was taken that paragraph 64 of Schedule B1 does not spell out the consequences of an infringement of it, as between the company in administration and any third party. But in my judgment a third party who or which deals with a company in administration or with an officer of that company in circumstances which involve the company or its officer committing a breach of paragraph 64, without any step being taken by the administrators to confer actual or ostensible authority for the purposes of the relevant exercise of the management power, cannot complain of the administrators' recourse to paragraph 64 on the basis that the management power was exercised without their authority. Were it necessary to do so, I would conclude that a third party would be unable to avoid the consequences, even if it was equity's darling i.e. a *bona fide* purchaser for value without notice of the infringement. In the present case, since LBF neither could nor did pay the repurchase price, it was nothing more than a volunteer, in relation to the proprietary interest which it alleges it received as a result of the switching off of Automatic Rascals.

Conclusion

369. For the reasons thus far given, I have therefore concluded that, in relation to securities which were, at the moment of LBIE's collapse, the subject matter of Automatic Rascals, LBF has no proprietary interest in such securities.

Manual Rascals

370. The analysis of the Manual Rascals transactions between LBIE and LBF largely follows the above analysis of the Automatic Rascals process, but is simpler because of the absence of any repeated one day repos, and the concession by LBF that Manual Rascals transactions have all remained open since the collapse.

The On-Legs

371. Mr Moss advanced substantially the same "no payment by LBIE" submission in relation to the stock loans under Manual Rascals as he did in relation to the repos under Automatic Rascals. For the most part, those submissions also fail, for the reasons which I have already given. In relation to stock loans instituted on the same

day as the settlement of the acquisition from the street, there is in my judgment no relevant distinction between Automatic and Manual Rascals in relation to the first (and, for a stock loan, only) on-leg.

372. In relation however to stock loans instituted on a later date, there is at first sight less force in my conclusion that the acquisition from the street required no funding from LBF or therefore from LBHI within the meaning of clause 1 of the ICFA. Pending the putting into place of a stock loan, it may be said that, for a brief period, the acquisition from the street was funded by an unsecured debt due from LBF to LBIE, rather than by LBIE's payment obligation under the on-leg. The period between the settlement of the acquisition from the street and the on-leg under the stock loan is not so obviously a mere *scintilla temporis*, without legal or commercial consequences.

373. Nonetheless, by parity of reasoning with the purposive analysis which I have applied to the funding issue in relation to Automatic Rascals, it cannot objectively have been the parties' intention that the deeming provisions of clause 1 of the ICFA should be applied to the question whether or not LBF was a debtor for the acquisition price from the street, so as to provide the offset against LBIE's payment obligation in relation to the on-leg. To treat the effectiveness of the Manual Rascals process as depending in each case upon whether the stock loan was entered into on the day of the settlement with the street, or on some later date, seems to me commercially incomprehensible. It would in any event have no impact at all on the outcome of the alternative case based upon estoppel by convention. Furthermore the alternative analysis by way of habitual waiver of payment obligations is no more persuasive, not least because LBIE is recorded as a secured creditor of LBF in relation to stock loans in exactly the same way as it is in relation to repos. Perhaps more importantly, the waiver analysis in relation to stock loans takes LBF nowhere because it is not suggested that the relevant stock loans have ever closed.

374. There might have been some substance in treating delayed stock loans as falling within a separate category from other Rascals processing (so far as concerns the applicability of the case based on the ICFA) if there was evidence that they had been recorded in the parties' mutual records any differently from other Rascals transactions. On the contrary, LBIE is shown as LBF's secured creditor just as much in relation to delayed stock loans as it is in relation to automatic repos and immediate stock loans, at least in the sense that there was no submission or evidence to the contrary.

<u>After the Collapse</u>

375. Mr Moss very fairly acknowledged on behalf of LBF that if his submissions as to the absence of any passing of title on the on-leg under the stock loans did not prevail, then absolute title to the underlying securities rested with LBIE at the time of the collapse. Nonetheless he and the other respondents advanced a claim for a beneficial interest under a resulting trust, of the <u>Barclays Bank Limited v. Quistclose</u> variety. The argument ran as follows. The main purpose of Manual Rascals was to facilitate LBIE's lending of the underlying securities to the street, in the course of its business. Once LBIE ceased business, that purpose became impossible of fulfilment. Accordingly, but by way of resulting trust, LBIE should be regarded as holding the underlying securities upon trust to give effect to the same proprietary interest in LBF as had preceded the putting in place of the stock loans pursuant to Manual Rascals.

376. As authority for that argument Mr Moss took me to the thorough analysis of the Barclays v Quistclose resulting trust in Lord Millett's dissenting speech in Twinsectra Limited v. Yardley [2002] 2 AC 164, at paragraphs 68-100. The gist of Lord Millett's analysis (and in this respect he was the only one of their Lordships to express any view on the subject, rather than a dissenter) was that if A transfers money or other property to B to be used only for a specific purpose, then B obtains no beneficial interest in the property, but holds it as a fiduciary, first to use it if possible for that purpose, and if not, on resulting trust for A. Such an arrangement "prevents the borrower from obtaining any beneficial interest in the money, at least while the designated purpose is still capable of being carried out" (paragraph 69). The question in every case "is whether the parties intended the money to be at the free disposal of the recipient" (paragraph 74). "The duties are fiduciary in character because a person who makes money available on terms that it is to be used for a particular purpose only and not for any other purpose thereby places his trust and confidence in the recipient to ensure that it is properly applied. This is a classic situation in which a fiduciary relationship arises, and since it arises in respect of a specific fund it gives rise to a trust." (paragraph 76).

377. Lord Millett concluded as follows, at paragraph 100:

> "As Sherlock Holmes reminded Dr Watson, when you have eliminated the impossible, whatever remains, however improbable, must be the truth. I would reject all the alternative analyses, which I find unconvincing for the reasons I have endeavoured to explain, and hold the *Quistclose* trust to be an entirely orthodox example of the kind of default trust known as a resulting trust. The lender pays the money to the borrower by way of loan, but he does not part with the entire beneficial interest in the money, and in so far as he does not it is held on a resulting trust for the lender from the outset. Contrary to the opinion of the Court of Appeal, it is the borrower who has a very limited use of the money, being obliged to apply it for the stated purpose or return it. He has no beneficial interest in the money, which remains throughout in the lender subject only to the borrower's power or duty to apply the money in accordance with the lender's instructions. When the purpose fails, the money is returnable to the lender, not under some new trust in his favour which only comes into being on the failure of the purpose, but because the resulting trust in his favour is no longer subject to any power on the part of the borrower to make use of the money. Whether the borrower is obliged to apply the money for the stated purpose or merely at liberty to do so, and whether the lender can countermand the borrower's mandate while it is still capable of being carried out, must depend on the circumstances of the particular case."

378. Accepting as I do for present purposes the whole of that analysis, I consider that the assertion of a resulting trust in the present case is manifestly unsustainable, for the following reasons. First and foremost the fundamental purpose and effect of the stock loans was precisely to confer absolute title upon LBIE in relation to the underlying

security, to the exclusion of any continuing proprietary interest in LBF. Secondly, LBIE paid for the transfer of LBF's beneficial interest by lodging collateral of equivalent value. As Mr Moss eventually reluctantly acknowledged, he could not suggest that LBF could enjoy a beneficial interest under a resulting trust affecting the underlying securities without repaying that collateral in full. Thirdly, the effect of the stock loan was not to confer a limited permission (still less obligation) on LBIE to use the underlying securities for a specified purpose, but rather to give LBIE an unfettered right of use, coupled only with a personal obligation to transfer equivalent securities on closure of the stock loan, in exchange for repayment of the collateral. Fourthly, an important purpose of the stock loan (central to its effect for capital adequacy purposes) was in commercial terms to render LBIE a secured creditor of LBF in relation to the return of the collateral. To describe the purpose of the transaction as having become impossible of fulfilment by reason of LBIE's insolvency is completely to ignore the fact that, because of LBF's insolvency, the status of the transaction as conferring security has, for the first time, become of the utmost value to LBIE, and to its unsecured creditors.

379. In short, I find it difficult to conceive of any transaction (other than an outright sale) less amenable to a Barclays v. Quistclose analysis than the stock loans with which this case is concerned.

Conclusion

380. For the above reasons, I have concluded that LBF is no more entitled to a beneficial interest in securities the subject of stock loans under Manual Rascals than in relation to the repos under Automatic Rascals.

LBSF

381. I have reached precisely the same conclusions in relation to LBSF's claims as to the ineffectiveness of the Rascals processes as I have in relation to LBF. In certain small respects, Mr Jones for LBSF relied upon aspects of the transactional relationship between his client and LBIE which differed from the pattern in relation to LBF. In particular, LBSF was to a significant extent a single ticket rather than a two ticket participator in acquisition from the street. Mr Jones sought to pray in aid an antecedent to the ICFA between LBSF, LBIE and LBHI, to which Mr Moss for LBF did not have recourse.

382. Nonetheless, for reasons already given, those small differences in the pattern of dealings between LBIE and LBSF give rise to no relevant differences in the process of analysis of LBSF's challenges to the validity of the Rascals processes in conferring absolute title on LBIE. I have taken on board distinct submissions made by Mr Jones for LBSF when addressing the matter as between LBIE and LBF, because it seemed to me that his submissions, if well-founded, would for the most part avail LBF as well. As will be apparent, I have not been persuaded by those submissions. It follows that my conclusions in relation to LBSF, both in relation to Automatic and Manual Rascals, match those which I have described in relation to the claims of LBF.

LBAH/LBCCA

383. No such similar equivalence applies to the analysis required of the extraordinarily complicated position as between LBIE and the two Hong Kong affiliates. The central difficulty lies in finding an interpretation of the Novation and Netting Agreement ("NNA") which makes sense of the very different way in which Automatic and Manual Rascals processes were applied to securities acquired and held by LBIE for the book of LBCCA. Whereas LBAH acted as LBIE's repo counterparty under Automatic Rascals, LBCCA acted as the stock lender under Manual Rascals. Whilst it is therefore necessary to analyse Automatic and Manual Rascals separately, an attempt to understand the meaning and operation of the NNA which is based upon an exclusive focus upon one or other of those processes may fairly attract the criticism that it involves the wearing of blinkers. I shall therefore begin by addressing the interpretation of the NNA by reference to the whole of LBIE's activity of the acquisition and Rascalling of securities for the Hong Kong affiliates, before addressing the effectiveness of each of the Automatic and Manual Rascals processes separately.

384. While the court is of course entirely neutral as between the parties in relation to a dispute about the meaning of an agreement, where (as here) the competition is between a party which asserts that the agreement is effective to achieve its obvious purpose, and a party which asserts that it is not, then the court is in my judgment obliged to search for an interpretation which achieves rather than destroys that purpose (i.e. *ut res magis valeat quam pereat*), albeit not to re-write the parties' bargain. The court's duty is in that respect no different from that which it faces when confronted by rival interpretations of a commercial agreement, one of which makes commercial sense, and the other of which produces a commercial nonsense.

385. Mr Dicker's primary submission, for LBCCA and LBAH, was that whatever the meaning and effect of the NNA in relation to inter-company debts between its parties, it had no effect at all in relation to proprietary interests in securities. The result was that a proprietary interest in securities acquired for LBCCA's book could not be transferred to LBIE by anyone other than LBCCA. Since LBCCA was not a party to the relevant Rascals agreement (the MPRA between LBIE and LBAH of November 1997), nor (according to the electronic book entries), the on-leg seller under any of the repos entered into under the Automatic Rascals process, that process must therefore have been wholly ineffective to transfer any proprietary interest of LBCCA in the underlying securities. The implication behind Mr Dicker's submissions was that the decision that the Automatic Rascals process should be put in place between LBIE and LBAH rather than between LBIE and LBCCA was simply a dreadful mistake, from the consequences of which LBIE is now unable to escape.

386. Conversely, although this was not part of his primary case, Mr Dicker pointed out that if the NNA was in some way effective to confer upon LBAH the necessary title with which to effect Automatic Rascals transactions with LBIE, then it is difficult to see how it could be construed so as to leave LBCCA with the requisite title for the purposes of Manual Rascals transactions with LBIE. His point was that there was no uniform interpretation of the NNA which extended its effect to proprietary interests in securities in a way which made sense of the parties' subsequent dealings.

387. Mr Dicker submitted, and I agree, that the starting point is to understand what the word "deliverable" means as part of the definition of "Inter-Company Balance" in clause 1 of the NNA, and as part of the phrase "or more than one security is deliverable under two or more balances" in clause 7.1, under the heading Settlement Netting. In the latter context he took me to paragraph 1-006 of Wood on Set-off and Netting, Derivatives, Clearing Systems (2nd edition) which, he submitted, suggested that the settlement netting of deliverables normally relates to personal obligations to deliver securities due for performance on the same day. In relation to novation netting he took me to paragraph 12.09 of Benjamin on Finance Law which, he submitted, suggests that novation netting is generally concerned with fungible personal obligations, rather than with proprietary interests. Next, he handed up some worked examples of the insoluble problems which would occur if the NNA was sought to be applied by way of settlement or novation netting in connection with proprietary interests owned by Hong Kong companies in relation to securities held by LBIE, and proprietary interests of LBIE in relation to securities held by a Hong Kong hub company. Finally, Mr Dicker submitted that, even though they were made on the same day, it was wrong to treat the NNA and the MPRA as two agreements forming part of a larger overall transaction, so that the interpretation of one could be assisted by reference to the other. The NNA was, he said, entered into for reasons separate and distinct from the furtherance of the Rascals project.

388. If Mr Dicker had been correct in his submission that recourse cannot properly be had to the MPRA for the purpose of interpreting the NNA, I would have agreed with him that, looked at purely on its own, it would be difficult to think that the references to deliverables in the NNA extended beyond their normal usage, i.e. to personal delivery obligations due for performance on the same day. That may fairly be ascribed as the ordinary meaning of the word deliverable in the context of settlement netting and novation netting. But in my judgment it is not merely permissible but essential to interpret the NNA as part of a package which included the MPRA. This is not merely because they were made by overlapping (although not identical) parties on the same day, but because there is also a large subject matter overlap between the two agreements, and it is plain from the surviving communications between the parties about their drafting, that the NNA was formulated with the Rascals processes very much in mind.

389. Although the House of Lords has in Chartbrook Limited v. Persimmon Homes Limited [2009] UKHL 38 very recently upheld the rule excluding the parties' negotiations as admissible guides to the interpretation of their agreement, extrinsic evidence has always been admissible for the purpose of ascertaining, as a surrounding fact, the commercial or business object of the transaction: see Prenn v. Simmonds [1971] 1 WLR 1381 at 1384 per Lord Wilberforce. It would in my judgment be extraordinary if recourse could not be had to the prior discussions of parties representing associated Group companies for the purpose of understanding whether the NNA had Rascals transactions between its parties as part of its intended subject matter, or whether (which is really the same thing) the NNA and the MPRA of even date were agreements dealing simultaneously with an overlapping subject matter, and therefore each to be construed by reference to the other.

390. The NNA was of course made between a larger number of parties than the MPRA. The evidence did not show whether or not similar MPRAs were made between LBIE

and other Hong Kong companies (parties to the NNA) for which LBIE acquired and held securities eligible for Rascalling. That is because no other Hong Kong companies have made claims in relation to any of the securities the subject matter of this application, so that the detail of LBIE's relationship with them has simply not been investigated.

391. Once the NNA and the MPRA are placed on a table side by side, it becomes immediately apparent (at this stage without looking at the parties' subsequent conduct) that their mutual understanding was that the novation provisions of the NNA had the consequence that LBAH rather than LBCCA should be the on-leg seller or stock lender under Rascals transactions, since LBCCA made no similar simultaneous MPRA with LBIE, and since the MPRA between LBAH and LBIE was, on its face, designed to operate as a master Rascals agreement both in relation to repos and stock loans.

392. As at November 1997 there did in fact exist as between LBIE and LBCCA both an OSLA (i.e. a master agreement in relation to stock lending) and a GMRA (in relation to repos), having been made between those parties in March and August 1995 respectively. This is not therefore a case in which there existed no contractual basis for repos and stock loans between LBCCA and LBIE. The significance of the MPRA made between LBIE and LBAH on the same day as the NNA is that because LBAH was purely a financing company with no securities trading activities of its own, the only rational explanation for its entering into an MPRA with LBIE in November 1997 is that it was assumed that it would acquire title to securities eligible for Rascals, by virtue of the NNA, by a process therein described as novation, from some other Hong Kong trading company which did use LBIE for the acquisition and holding of securities. The question is whether any such intention can be seen to be implemented within the NNA by any legitimate process of interpretation, rather than by rewriting it.

393. In my judgment, it both can and should. The answer emerges by way of analogy with the novation of a debt. Clause 6 of the NNA is about novation pure and simple, rather than either novation netting or settlement netting. It is in that respect separate from those conventional contexts as described in the two text books to which Mr Dicker drew my attention. Clause 6.2 applies to all Inter-Company Balances (as defined) and spells out in relation to debts that a debt originally owed, for example, by LBIE to LBCCA should be replaced by two debts, by LBIE to LBAH, and by LBAH to LBCCA. This is described as something which occurs in relation to all "outstanding rights and obligations under such Inter-Company Balances".

394. Clause 6 does not expressly refer anywhere to deliverables, but its application to deliverables is the result of the inclusion of deliverables in the definition of Inter-Company Balance to which I have already referred. Furthermore, it is clear from clause 7.1 that a deliverable is a right and/or obligation in relation to a security.

395. The existence of a trustee beneficiary relationship between LBIE and LBCCA in relation to a security held for LBCCA's account in a LBIE depot creates fiduciary obligations and proprietary rights which, in my judgment, it was intended should be subjected to a process akin to novation. It was not intended that LBCCA should simply transfer its proprietary interest in the underlying security to LBAH for nothing in return. That would be wholly contrary to the purposes of clause 6, in which the

rights of the creditor (here LBCCA) against one debtor (LBIE) are replaced by identical rights against another debtor (LBAH), while LBAH acquires similar rights as against LBIE.

396. In my judgment that concept may readily be applied to fiduciary obligations and proprietary interests under a trustee beneficiary relationship by the interposition of LBAH in the chain of beneficial title between LBIE and LBCCA. LBAH thus becomes LBIE's beneficiary, but it holds those rights upon trust for LBCCA as the ultimate beneficial owner.

397. There is nothing unusual or surprising in the creation of a structure of trusts and sub-trusts between the legal owner and ultimate beneficial owner in relation to intermediated securities. As Mr Moss submitted it is the very basis upon which the modern system for the intermediation of securities works. Thus, ignoring Rascals and the NNA for the moment, where LBIE settled into its depot account a security acquired for the book of an affiliate, with the intent that the affiliate should have a proprietary interest in it, there necessarily existed a structure of trust and sub-trust, pursuant to which LBIE has a proprietary interest as against its depository (which holds the legal rights) and the affiliate has a proprietary interest as against LBIE. Under that structure the depository recognises LBIE as its beneficiary and in turn LBIE recognises the affiliate as its beneficiary.

398. That analysis of the operation of clause 6 of the NNA in relation to proprietary interests in securities held under a trust will not entirely satisfy a purposive interpretation of the NNA and the MPRA read together unless its effect is also to confer on LBAH as intermediate trustee a right to confer absolute title to the underlying security on LBIE so as, in effect, to overreach LBCCA's ultimate beneficial interest. Again, I see no reason why such a power to overreach should not be treated as included. Wherever a trustee sells trust property with the authority of the beneficiary (i.e. pursuant to a power in the relevant trust instrument) that sale necessarily overreaches the beneficiary's proprietary interest in the subject matter of the sale, so that his interest then attaches to the *quid pro quo*, i.e. to the proceeds of sale. I see no reason why the interposition of LBAH as an intermediate trustee between LBIE and LBCCA should not confer upon LBAH the same power, in relation to the Rascalling by LBAH of the underlying securities, either by repo or stock loan, under the MPRA.

399. Finally, there remains the apparent inconsistency arising from the fact that whereas LBAH entered into the repos under Automatic Rascals, LBCCA entered into the stock loans under Manual Rascals. This is not strictly a matter of interpretation, but rather of reconciling an available interpretation with the subsequent conduct of the parties. In my judgment there is no necessary inconsistency. An interpretation of clause 6 of the NNA which leaves LBCCA as the ultimate beneficial owner of the underlying security, but with LBAH rather than LBIE as its immediate trustee, nonetheless seems to me to leave LBCCA free to deal with its ultimate beneficial interest, provided only that it has not in the meantime been overreached by a sale, repo or stock loan in relation to that same security by LBAH. It must be borne in mind in this context that the whole of the Rascals processes involved the affiliates as repo sellers or lenders, not of the underlying securities themselves, but only of such beneficial interest in those securities as they may have enjoyed.

400. I shall now address the effectiveness or otherwise of the Automatic and Manual Rascals transactions entered into respectively by LBAH and LBCCA upon the basis of the interpretation of clause 6 of the NNA at which I have arrived. Because I acknowledge that my interpretation involves at least an extension of the ordinary meaning of the words used, I shall also address the remaining issues on the alternative basis that Mr Dicker's more restricted interpretation of the NNA is the correct one.

Automatic Rascals

The On-Legs

401. Besides adopting the submissions of Mr Moss as to the ineffectiveness of the on-leg for the purposes of transferring any proprietary interest to LBIE, Mr Dicker advanced the following main submissions specific to LBCCA/LBAH. First, he said that LBAH simply had no proprietary interest to transfer, because the NNA was on its true interpretation not concerned with proprietary interest in securities. I have rejected that submission, but will return to its consequences if correct. Secondly he submitted that in any case LBAH did not owe LBIE a debt for the acquisition price from the street, to which LBIE could have recourse by way of offset as a means of payment of the on-leg purchase price. In this respect Mr Dicker was assisted by the inter-company records which, as I have described, continued to show LBCCA as LBIE's unsecured debtor for the acquisition price from the street, from the settlement date in relation to any particular security until the following month end. Thereafter LBCCA was shown as owing the acquisition price to LBHI, although this may have been replaced by a novation to LBAH at the year end.

402. I do not accept that submission either. The debt for the acquisition price from the street owed by LBCCA to LBIE was, on any view, an Inter-Company Balance, and therefore liable to be novated pursuant to clause 6 of the NNA. Clause 6.1 provides that:

> "Inter-Company Balance shall be deemed to be novated in accordance with clause 6.2 as of the time immediately after that Inter-Company Balance becomes due and payable, notwithstanding that it may not be shown or recorded in the Balance Ledger at that time."

The "Balance Ledger" is defined as meaning "the ledger of certain balances and debts owing between two Parties and prepared and maintained by LBAH for the purposes, *inter alia*, of this agreement".

403. I was not shown any document or screenshot corresponding to that definition of "Balance Ledger" but it is clear that clause 6.1 was designed to provide for a deemed immediate novation, regardless whether the parties' mutual accounting systems were operated in such a way as to record it as occurring then, or thereafter. If effect is given to that deeming provision, it follows that LBCCA's initial debt to LBIE for the purchase price of any security from the street was immediately novated so as to be deemed a debt owing to LBIE by LBAH, and therefore available by way of offset against LBIE's debt to LBAH for the on-leg purchase price under the first repo.

404. I have already concluded that from LBIE's perspective the month end novation and netting process between LBIE, LBHI, LBCCA and LBAH had the same effect thereafter as if there had been an immediate novation of the acquisition debt between LBIE, LBAH and LBCCA at the time of the first repo. As Mr Milligan put it, at the month end it all came out in the wash. That left only an imbalance as between LBCCA and LBAH, in relation to their separate unsecured accounts with LBHI. For reasons already explained, I have been unable to resolve, without disproportionate further delay and expense, whether this was also resolved at the year end. Whether it was or not, I do not consider that any such enduring imbalance as between LBCCA and LBAH is of any consequence in relation to the question whether the repos between LBAH and LBIE were effective to confer on LBIE absolute title to the underlying securities. LBIE was entitled to engage in repos with LBAH on the footing that there had been a deemed novation of LBCCA's acquisition debt to LBAH, whether or not LBAH, LBCCA and LBHI followed through the consequences of the novation in their mutual accounting.

405. I turn to deal with the consequences in terms of the effectiveness of the repo on-legs in the event that Mr Dicker's interpretation of the limited scope of clause 6 of the NNA should prevail in a higher court. Mr Milligan advanced an alternative case based on estoppel by convention, but he never resiled from his primary submission that LBCCA never acquired a proprietary interest in the securities in the first place. I shall deal with that question first.

406. I have already concluded that, prior to the implementation of Rascals, the consensual basis upon which LBIE acquired, settled and held securities for the accounts of its affiliates was not such as to confer a proprietary interest on the affiliates. By contrast, I have concluded that, once LBIE and any particular affiliate restructured their relationship so that eligible securities would be the subject of Rascals processing, this necessarily involved the initial conferral of some proprietary interest in eligible securities upon the affiliate.

407. Mr Dicker's primary case, based upon an interpretation of the NNA which rendered it inapplicable to proprietary interests in securities, was of course that LBCCA had no part at all in the supposed Automatic Rascalling of its eligible securities, the whole process taking place, by virtue of a ghastly mistake, between LBIE and LBAH. If that be right, then I consider that the basis of my conclusion that, following the implementation of Rascals, a proprietary interest in securities eligible for Automatic Rascals was conferred upon affiliates is simply inapplicable to LBCCA. Mr Dicker had no cogent answer to this conundrum when I raised it with him as a possible outcome during his closing submissions.

408. On any view, LBIE continued to deal with securities acquired for LBCCA's book, after the implementation of Rascals, with the same liberty to use them for the purposes of its own business as it had done prior to 1996. Since the parties used and had access to a Group-wide mutual system of book-keeping, it is in my judgment unreal to suppose that LBIE's use of those securities was unknown to LBCCA, or that, unless and until LBCCA participated in the Rascals processes it thought that, for the first time in 1996, LBIE would cease using securities held for its book as it had done since 1993.

409. The question whether there arose an estoppel by convention between LBIE and LBCCA is by no means straightforward. At the heart of the Administrators' similar case against LBF and LBSF was the fact that, from start to finish, those two affiliates constantly recorded LBIE as a secured creditor in respect of the off-leg repurchase prices. So did LBAH, but of course LBCCA did not. Nonetheless, LBCCA had full access to the ITS accounts system, which for almost ten years from 1997 constantly recorded the Automatic Rascalling by LBAH of what (on this analysis) were LBCCA's securities, without a word of protest. Furthermore LBCCA was no less privy to the purposes for which the Rascals processes had been instituted than any other affiliate, being one of the Hong Kong sub-group of companies all of which were represented in discussion about the Rascals process by the same individuals.

410. Issues as to whether a person alleged to be subject to an estoppel by convention has sufficiently "crossed the line" as to make itself responsible for the conventional understanding in question normally arise between persons dealing with each other at arm's length. In the exceptional circumstances constituted by the fact that all the potential parties to the convention estoppel here relied upon are co-subsidiaries or sub-subsidiaries of the same holding company, doing business for the benefit of common shareholders, using a common accounting and book-keeping system, and sharing the services of individuals employed on a non-exclusive basis, it seems to be that the necessary sharing or acquiescence is capable of being established by those features rather than, as would be necessary in an ordinary case, by some specific "crossing of the line" between persons dealing at arm's length. Accordingly, although with rather less confidence than in relation to LBF and LBSF, I have concluded that if it had been necessary for the Administrators to rely upon a convention estoppel for the purpose of preventing LBCCA now from denying that the Automatic Rascals on-legs were effective in relation to any proprietary interest of its own in the underlying securities (whether because of want of title or non-payment by LBIE), the Administrators' case in that regard ought to succeed.

411. I have considered whether the possibility that LBCCA and LBAH failed ever to record in their books a novation to LBAH of LBCCA's acquisition debt means that the recognition of a convention estoppel would now work an injustice to either of them, or to any other person. It will be recalled that I have been unable to decide, without disproportionate delay, whether this was or was not done at the year end. Mr Dicker submitted that it would not be just for LBCCA to lose any proprietary interest in the underlying securities while at the same time owing LBHI the full acquisition debt from the street.

412. I am not persuaded that there would be any relevant injustice. The fact that LBCCA, LBAH and LBHI may, as between themselves, have failed to reflect in their mutual accounting the consequences of the Automatic Rascalling of LBCCA's securities which was obviously intended strikes me as an internal matter between them. It had no consequences as between them as a group and LBIE since, as I have described, it all came out in the wash at each month end. LBHI has declined despite invitation to participate in this application. LBCCA and LBAH have not asked the court to adjudicate on any issues as to beneficial ownership which might have arisen between them, the inference being that any such question can be resolved between them, without the assistance at least of the English court. As I see it, the imbalance which would remain if the year end adjustments were not made is an imbalance essentially

between LBCCA and LBAH, in their respective inter-company accounts with LBHI. It is not one with which this court need be concerned.

413. Mr Dicker's last line of defence was that even if an estoppel might be established, it would not rescue LBIE from the requirement for writing imposed by s. 53(1)(c) of the Law of Property Act 1925. He relied by analogy upon the *obiter dicta* of Lord Scott in Cobbe v Yeoman's Row Management Ltd [2008] 1WLR 1752, at paragraph 29, to the effect that estoppel could not be relied upon as an answer to s. 2 of the Law of Property (Miscellaneous Provisions) Act 1989. If the NNA did not confer LBCCA's interest in the underlying securities upon LBAH, then there was, said Mr Dicker, no writing capable of validating any disposition of that interest, whether upon LBAH of LBIE.

414. Mr Milligan sought to meet that ingenious point by reference to Vandervell v. IRC [1967] 2 AC 291. But that case only establishes that s.53 has no application to a disposition by the trustee which, at the beneficiary's direction, carries with it the beneficial interest as well; see per Lord Donovan at pp. 317-8. In my judgment the real answer is that the estoppel merely prevents LBCCA from denying that LBAH was, by the NNA, constituted an intermediate trustee for LBCCA of its interest in the underlying securities. That was not itself a disposition of LBCCA's equitable interest. The transfer of LBCCA's equitable interest to LBIE was itself achieved by LBAH's participation in the Automatic Rascals process with LBIE which was itself fully documented, albeit electronically, by ITS. Accordingly the s.53 point fails. For completeness I should say that I have reached no conclusion as to whether Lord Scott's dictum in Cobbe v. Yeoman's Row is applicable to s. 53. If it is, it may be that a number of the cases which have recognised convention estoppel might need to be reconsidered.

The Off-Legs

415. Mr Dicker did not advance any submissions in relation to the consequences of the switching off of the Automatic Rascals process following the collapse, different from those advanced by Mr Moss and Mr Jones on behalf of LBF and LBSF. Nonetheless, the Administrators sought to introduce a specific alternative case against LBAH arising from the provisional winding up order made against that company on 19th September 2008, and what by common consent was therefore a consequential event of default under clause 10 of the applicable GMRA. I found it unnecessary to determine those issues, which include complicated questions of timing, as between the moment of the winding up order in Hong Kong and the question whether (contrary to my view) there was an on-leg or off-leg in relation to any particular repo during part of a business day. The issues are all questions of law arising upon facts which are either not in dispute, or which I have determined, and can therefore be addressed without a re-trial by a higher court if necessary.

Conclusion

416. For the above reasons, I have concluded that in relation to securities remaining in LBIE's depots for the book of LBCCA (or LBAH) which were, actually or apparently, the subject of Automatic Rascals processing between LBIE and LBAH, neither LBCCA nor LBAH retains any proprietary interest in them.

MANUAL RASCALS

417. Under this heading, the salient facts are that:

i) LBCCA rather than LBAH was the lender under each relevant stock loan.

ii) The parties' mutual records consistently showed LBIE as LBCCA's secured creditor in relation to its right to repayment of collateral.

iii) LBIE's obligation to pay collateral on the on-leg of each stock loan does not specifically appear as an entry on the unsecured inter-company account between LBIE and LBCCA. Nonetheless it is possible to identify a connection between that obligation of LBIE and a receivable shown on LBCCA's inter-company account with another Hong Kong affiliate, namely LBACC, in each case arising as a result of the funding arrangements in existence between the Hong Kong companies.

iv) As with LBF and LBSF, all the stock loans remained open after the collapse, and it is not suggested that LBCCA has, or could, repay any of the collateral for which LBIE continues to be shown in their mutual records as a secured creditor.

418. On the interpretation of the NNA which I consider to be correct, there is nonetheless no title impediment which would have prevented LBCCA from making a stock loan to LBIE of its ultimate beneficial interest in the underlying securities. That is not because clause 6 of the NNA operated only in relation to securities eligible for Automatic Rascals, but because clause 6 did not prevent LBCCA from remaining the ultimate beneficial owner of them, with power to deal with its beneficial interest, subject only to any prior disposal of it by LBAH, by an authorised transaction as LBCCA's immediate trustee.

419. There is nonetheless a real problem with LBIE's case that LBCCA owed it a debt for the acquisition price from the street, against which LBIE could offset its obligation to pay collateral on the on-leg. If, as I have concluded, the effect of clause 6 of the NNA was to cause an immediate novation of that debt, so as to replace LBCCA with LBAH as LBIE's debtor, then there was on the face of it no immediately available offset to which LBIE could have recourse against LBCCA, by way of payment. Of course, the parties' mutual book-keeping did not show LBCCA's debt to LBIE as being novated to LBAH, at least before the year end, but in that respect clause 6.1 of the NNA contains a deeming provision which, at least as a matter of contract, overrides the absence of contemporaneous book-keeping entries.

420. The reality however is that LBCCA did get the benefit of LBIE's payment of collateral, not directly, but by the "around the houses" process which led in every case to LBCCA being credited with an equivalent amount in its inter-company account with another Hong Kong affiliate, LBACC. Mr Dicker very fairly acknowledged that if these accounting entries were capable of amounting to a process of payment, then LBCCA could not assert that it had not been paid the collateral in respect of the stock loan on-legs.

421. On any view, it seems to me that the constant recognition in LBCCA's and LBIE's mutual records that LBIE was a secured creditor of LBCCA in relation to the return of the collateral makes the alternative case for the establishment of a convention estoppel (sufficient to prevent LBCCA from denying the effectiveness of the stock loans as a means of transfer of LBCCA's beneficial interest to LBIE) just as strong as it is in relation to LBF and LBSF.

422. As for the consequences of the collapse in relation to Manually Rascalled securities, as between LBIE and LBCCA, Mr Dicker did not advance any alternative submissions to those put forward by Mr Moss and Mr Jones on behalf of LBF and LBSF. For the reasons already given, I consider that those submissions do not prevail.

Conclusion

423. It follows that for the above reasons, neither LBCCA nor LBAH retain any proprietary interest in securities which remain in LBIE's depots, to the extent that those securities were subjected to Manual Rascals processing.

LBI

424. The issue as to the effectiveness of Rascals processing as between LBI and LBIE for the purpose of passing title to LBIE seems to me, by comparison with the issues relating to the other respondents, very straightforward indeed. The salient facts may be summarised as follows:

i) There were no Automatic Rascals transactions between LBIE and LBI.

ii) LBIE holds securities in its depots in respect of which, at the time of the collapse, there have been identified thirteen open stock loans by LBI to LBIE. Of those, three of them are accompanied by evidence of payment by LBIE to LBI of the collateral. As to the remaining ten, there is, as at today, no such evidence.

iii) The ordinary process of pay-down on a daily or similar basis between LBIE and LBI means that, in respect of the acquisition of the underlying security from the street, LBI has paid LBIE in full and that, where (in relation only to three of the stock loans) there are book-keeping entries recording LBIE's liability in relation to collateral, that has also been paid.

425. Those facts mean first that none of the issues about non-payment for the on-leg of the stock loan caused by inter-company funding agreements between LBIE and the other respondents affect the issue as between LBIE and LBI. The only question arising in relation to the on-leg is a purely factual one, namely whether there is any evidence at all sufficient to show the recording and consequential pay-down of LBIE's obligation to pay collateral.

426. Mr Milligan did not suggest, in relation to securities for which there was a stock loan but no evidence of payment of collateral, that title nevertheless passed to LBIE by way of waiver of the payment obligation, or by estoppel. He accepted, rightly in my

view, that the Administrators' case in relation to the 13 stock loans depended upon proof of payment.

427. Mr Milligan submitted that I should answer the on-leg question in purely formulaic terms, leaving on one side the evidential question whether by further research the Administrators can show that payment of the collateral was booked. For LBI Mr Brindle submitted in closing that the Administrators have had quite enough time to research this question in relation to the small number of relevant securities, that the Administrators have failed to demonstrate any evidence sufficient to support a conclusion that the collateral was paid, and that there should now be an end of the matter in relation to those ten stock loans.

428. While I have considerable sympathy for Mr Brindle's submission, it has from start to finish been common ground that I should not on this application delve into disputed factual questions arising in relation to individual securities or transactions. While it may be that there is no basis other than Micawberism for Mr Milligan's suggestion that, even now, something might turn up to prove payment of the collateral, I consider that I should simply decide at this stage that, in relation to stock loans for which LBIE cannot prove payment of collateral, the beneficial interest in the underlying securities rests with LBI.

429. As for the remaining three stock loans, in which there is evidence of the booking (and therefore payment at the next pay-down) of collateral, Mr Brindle did not offer any submissions other than those already advanced in relation to Manual Rascals by the other respondents, as to why LBIE should not now be regarded as having absolute title to the underlying securities, it being common ground that LBI has neither repaid, nor is in a position to be able to repay, the collateral. Accordingly I conclude that in relation to those three stock loans, LBI has no proprietary interest in the underlying securities to the extent that they remain in a LBIE depot.

430. I fear that Mr Brindle and Mr Milligan may feel slightly short-changed in the sense that I have declined to adjudicate upon the issues of interpretation (pursuant to New York law) and application (in the English law context) of clauses 8.4 and following of the UCCBSA, or upon the issue whether, after 1995, LBI acquired a proprietary interest in non-Rascalled securities. The clause 8.4 issues are matters which, as it seems to me, do not arise on the facts relating to the only relevant Manually Rascalled transactions, since LBI appears to have paid LBIE the acquisition price from the street in full. Non-Rascalled securities are on any view outside the scope of this application, and the evidence about how LBIE used them is not available. It may well be that those issues will arise in relation to such securities transactions. If they do they can be determined as and when necessary.

Pearson & ors v Lehman Brothers Finance SA & ors (2011) [2011] EWCA Civ 1544

CA, CIVIL DIVISION

A2/11/0107

Lloyd LJ, Patten LJ and Tomlinson LJ

Date: 21 December 2011

21/12/2011

Lord Justice Lloyd:

Introduction

1. This appeal is against a decision of Mr Justice Briggs in a judgment handed down on 19 November 2010: [2010] EWHC 2914 (Ch). In the sequence of decisions arising from the collapse of the Lehman Brothers group, it is known as Rascals, for reasons that will become clear. The judge had to decide the issue in question as between the joint administrators of Lehman Brothers International (Europe) (LBIE) on the one hand and each of several affiliates in the Lehman Brothers group on the other. His decision was in favour of LBIE in each case. Two of the affiliates did not appeal. Two which did appeal settled their appeals with the administrators shortly before the hearing. We were therefore left with one appellant, Lehman Brothers Finance S.A. (LBF), and a Respondent's Notice by way of cross-appeal on the part of the administrators.

2. The hearing before the judge took the best part of three weeks, and involved contested oral evidence. He had to resolve similar issues on different facts as between LBIE and different affiliates. He recorded at paragraph 110 of his judgment that, as Mr Milligan Q.C. for LBIE had put it to him in opening, the nature of the parties' dealings was such as to give him the task of making the best sense of what was in some respects a mess.

3. As will appear, I agree with the result of the judge's decision in almost all respects, though not with all of his reasoning. I would pay tribute to his masterly and clear exposition of the facts and the issues, which makes it possible for me to set out the relevant facts the more briefly. Our task has been more limited, in that we have not had to concern ourselves with any appellant other than LBF. The issues arising on LBF's appeal and the Respondent's Notice are, however, quite difficult enough. I am grateful to Mr Milligan and Mr Bayfield, for LBIE, and to Mr Moss Q.C. and Mr Willson for LBF, whose well deployed written submissions and focussed oral arguments enabled us to grapple with the various issues arising in a hearing which was completed within 3 days.

The background to the dispute

4. The dispute is about beneficial ownership, as between LBIE and LBF, of securities which LBIE had acquired from third parties ("the street") for the account of LBF before the collapse of the group and which, so far as the outside world is concerned, remained and remain vested in LBIE. The securities include both fixed income and equity assets, the vast bulk of them being in dematerialised form. These are not represented by certificates, but rather by a chose in action represented by a credit in LBIE's account (a "depot") with a clearing house (usually Euroclear), depositary or custodian (collectively "depositaries"). A small minority of the securities were represented by certificates, which might be either registered or bearer. In each of these

cases legal title was usually vested in a nominee, which may be regarded as a depositary for these purposes.

5. LBIE acquired all the relevant securities in the course of a global settlement practice which had been a feature of the Lehman Brothers group's worldwide operations since the 1990's. The group's securities business was by then worldwide in scale and nature, operating in different markets and time zones, above all Europe, the USA and the Far East. Under its global settlements practice the group identified one group company, known as a hub company, in each main time zone into which all securities acquired in that time zone were settled on acquisition and from which in turn such securities were transferred on eventual sale to the street. LBIE was the hub company for securities bought and sold in Europe. As such, securities bought in Europe were acquired in its name, whether the acquisition was for its own account or for that of an affiliate, situated anywhere in the world. Thus, its entitlement to the securities, as against the depositary, was neutral as to whether the economic risks and rewards of ownership, as regards capital and income, were for its own benefit, where it bought as principal, or for that of an affiliate (or possibly for a non-affiliate client), where it bought as agent or broker. The securities with which it dealt included both those bought as part of a trading strategy to yield profits directly and also those bought or sold so as to hedge the risks arising from a derivatives business.

6. The group thus held securities between acquisition and eventual re-sale to the street. It developed a policy of using these securities to raise finance for the group by lending them to the street in the meantime. This short-term operation was also conducted by the relevant hub company, in this case LBIE. Whereas LBIE accounted to the relevant affiliate for any capital benefit on the eventual resale of the securities, and for any income received, it did not account to the affiliate for the benefit obtained by this short-term use of the securities.

7. The extensive use of hub companies in this way had many benefits for the group in terms of efficiency and economy. However the scale and nature of the operation were perceived to pose potential problems for the hub company, particularly in terms of the requirements of the relevant local regulators. The most acute of these, as perceived, lay with requirements of capital adequacy. These requirements, then as now imposed on undertakings carrying on various forms of financial business which involve risks of over-exposure, among them investment businesses of various kinds, include an obligation for the undertaking to hold minimum levels of capital which is either equity or subordinated to ordinary debt, the amounts to be held depending on the extent of the undertaking's exposure to various different risks. This is referred to as a regulatory capital charge. If the undertaking is owed substantial unsecured debts, the capital charge is higher than if the same debts are secured, and the charge may also differ according to how a debt is secured. For this reason if LBIE paid the acquisition price on settlement for securities from the street, and had the benefit of only an unsecured debt from the affiliate for which it had bought them, it would face a much higher regulatory capital charge than if it were secured for the debt due from the affiliate. In this context “secured” does not necessarily refer to a formal security such as a charge or pledge; if the creditor company held the beneficial as well as the legal title to the relevant asset the debt counted as secured.

8. For this reason the extent of the operations of LBIE of this nature was seen as presenting a risk that LBIE would be exposed to a substantial regulatory capital charge, which could be as much as 100% of the unsecured debt. The same was true of the US hub company, Lehman Brothers Inc. This problem was identified within the group in the early 1990's, together with two others. One of these was that the hub company might be required to segregate securities acquired for the

account of third parties (including affiliates) rather than, as was the group's practice, to hold all securities acquired whether for itself or for affiliates in unsegregated house accounts. The other was the need to ensure that, in order to be able to enter into effective transactions to raise finance on a short-term basis, the hub company had the absolute and unencumbered title which a transaction with the street would require, and that there was no risk that the title lay with the affiliate.

9. The perception that the group's practice as regards global settlements faced, or might face, these three problems led to a project being undertaken by a working party in order to find a solution. This project was known as Regulation and Administration of Safe Custody and Global Settlement, or Rascals for short. The same label was attached to the processes devised by the working party, adopted by the group and implemented from 1996 continuously until the collapse of the group. The judge summarised the Rascals processes as sharing certain common features, in his paragraph 11, as follows:

“(i) They were applied to large classes of securities acquired by LBIE, acting as hub company, for the account of affiliates.

(ii) In each case the affiliate purported to confer upon LBIE its proprietary interest (if any) in the underlying security in exchange for monetary consideration in the form of a purchase price or the deposit of monetary collateral, leaving the affiliate with a contractual right against LBIE to recover its proprietary interest in equivalent securities, again for monetary consideration, at a future date.

(iii) The commercial intent (albeit not contractual obligation) of the processes was usually that they should apply for the whole or substantially the whole of the period between the acquisition of the security from the street by LBIE and its eventual re-sale to the street.

(iv) The intended effect of the processes (whether or not successful) was to replace an unsecured obligation by the affiliate to refund LBIE the purchase price for the acquisition of the security from the street with a secured obligation of the affiliate to pay for its re-acquisition from LBIE of an equivalent security under the Rascals processes, whether by paying the repurchase price under the off-leg of a repo [i.e. a sale and repurchase contract] or paying back the collateral lodged during the currency of a stock loan (repos and stock loans being the two types [of] transaction alternatively used by all the Rascals processes).”

10. The Rascals process, as used between LBIE and LBF, took two different forms. In some cases it was dealt with automatically; in the others it was processed manually. Automatic Rascals applied to fixed-income securities, whereas the manual version was applied to equities. The judge noted at paragraph 165 that because most of LBF's business was in equity-based derivative transactions, most of LBIE's acquisitions for LBF were of equities, so that most of the Rascals transactions as between LBIE and LBF were of the manual kind. For convenience of exposition he dealt with automatic Rascals cases first, and I will follow his example.

11. Automatic Rascals, once initiated in respect of particular securities, was fully computerised and proceeded without human intervention unless and until the securities were sold back to the street. I gratefully adopt the judge's summary explanation of this process, as set out in paragraphs 13 to 18 of his judgment:

“13. On the day of the settlement of LBIE's acquisition of the security from the street, LBIE and the affiliate entered into a repo contract, providing for the immediate sale of the security by the affiliate to LBIE for a fixed price in fact equivalent to its value that day (“the on-leg”), followed by a sale back of an equivalent

security by LBIE to the affiliate on the following day at the same price plus an interest charge or fee ("the off-leg"), with LBIE having the right of use of the security in the meantime.

14. On the following day LBIE and the affiliate would enter into a replacement repo, in all respects identical to the first, save that the price would be fixed by reference to the marked to market value of the security on that day. This process would then be repeated on every subsequent day of the period during which the security (or its equivalent) was held, until and including the day before the settlement of the eventual sale of the security back to the street. Thus, the settlement of that sale would coincide with the off-leg of the last in the series of computer-generated repo transactions between LBIE and the affiliate.

15. Pursuant to master agreements between LBIE and each of its relevant affiliates, the repo transactions under Automatic Rascals were on industry standard terms, pursuant to which title to the underlying security was not to pass either under the on-leg or the off-leg of the repo until payment. …

16. It was not the intention of the designers of Automatic Rascals that the purchases and re-purchases constituted by the on and off-legs should be cash settled. Rather, payment and repayment was intended to be achieved, in form by what I shall loosely call book entries, but in substance by a series of successive offsets. Thus, the affiliate's debt to LBIE for the acquisition price of the security from the street was largely offset by LBIE's debt to the affiliate on the on-leg of the first repo. The affiliate's debt to LBIE under the off-leg of the first repo was in turn largely offset by LBIE's debt to the affiliate on the on-leg of the second repo. These offsets continued until the settlement of the sale of the security to the street, whereupon the affiliate's debt on the off-leg of the last repo was largely offset by LBIE's obligation to account to the affiliate for the proceeds of the sale of the security back to the street.

17. I have throughout that summary used the phrase "largely offset" to reflect the fact that the cross debts were not necessarily, or even usually, identical. Differences would arise from the constantly changing value of the underlying security, and the fixing of the repo prices by reference to its marked to market value from time to time. Thus for example, a rise in the value of the security between the trade date and the settlement date of the acquisition from the street would mean that LBIE's debt on the first on-leg would exceed the affiliate's debt in relation to the purchase price, and vice versa. Similar changes were caused by marked to market movements during the series of daily repos, and by any disparity between the sale price of the security on the trade date, and its marked to market value on the settlement date, back to the street. Other differences would arise from fees and interest charges arising under the repos being added to the amounts payable.

18. I have in the same phrase used "offset" rather than set-off to record the fact that, in the parties' accounting records, the nearly equal but opposite credits and debits between LBIE and each affiliate were not immediately cancelled by journals and replaced by a net balance. I shall describe in due course how the opposing entries were in due course dealt with. …"

12. The Automatic Rascals process applied to any securities which, when purchased, were treated as eligible for Rascals. Securities which were not in that category might be dealt with in somewhat the same way, but rather more ad hoc, and by individual manual operation. This was known as Manual Rascals. The process was mainly used in relation to equities and involved open-ended stock loans rather than overnight repos. The judge said of this process, at paragraphs 19 and 20:

"19. … They provided for transfer by the affiliate of its title to the security back to LBIE

in exchange for monetary collateral, with a right in the affiliate to reacquire title to an equivalent security upon payment of the collateral back to LBIE, with small adjustments for a stock loan fee and/or an interest charge in relation to the collateral and provision for margining adjustments to the collateral during the life of the stock loan, to reflect changes in the marked to market value of the security. Manual Rascals therefore required no daily repetition of transactions between acquisition and resale of the security from and to the street. Furthermore, the evidence does not enable it to be said with confidence that Manual Rascals was invariably or even usually applied to a security on the day of the settlement of its acquisition from the street.

20. As with Automatic Rascals, it was not envisaged by the designers of the process that cash collateral would actually be delivered by LBIE on the making of the stock loan, or physically redelivered by the affiliate upon its termination. Rather, payment was, again, to be recorded in book entries, but achieved by offset. LBIE's obligation to lodge collateral was intended to be achieved by an offset against the affiliate's debt for the price of the acquisition from the street. Similarly, the affiliate's obligation to repay collateral at the end of the stock loan was to be offset against LBIE's obligation to account for the proceeds of the sale of the security to the street. Again, these offsets were not precise, due to movements in the value of the underlying security by reference to which the collateral was calculated, between the original trade date for the acquisition and the settlement of the sale, in each case with the street."

13. As the judge pointed out, reference to securities held by LBIE must be understood as referring to the title which LBIE held as against the relevant depositary. As against the outside world, LBIE remained the holder throughout, and the Rascals process was entirely internal to the group. Its consequences, or at least its perceived consequences, were reflected in the regulatory reporting of those companies within the group which were regulated, and in the published accounts of the relevant members of the group.

14. The Automatic Rascals process continued to operate in relation to any given holding of securities, absent human intervention by way of a sale of the securities to the street. When the group collapsed on 15 September 2008, nothing was done to stop the process in practice until 23 September, though LBF gave a notice on 16 September which, it contends, brought the process to an end as at that time. According to the book entries generated by the system, the final off-leg on 23 September was settled by LBF, but it is common ground that no real money changed hands at that stage, any more than at any other stage of the Rascals process. So far as securities subject to the Manual Rascals process are concerned, the transactions being open-ended and requiring manual operation, nothing happened to the relevant holdings of securities after 15 September 2008.

15. The issue in the proceedings as between LBIE and LBF is which of the two companies has the beneficial title to the securities held (as against the street) by LBIE on 15 September 2008. These were whatever was left of those which had been acquired for LBF and not yet sold back to the street, and which had not been sold by way of repo or lent to the street by LBIE and not yet bought back or returned. Because LBIE was insolvent it was unable to recover such securities, not being able to pay the repurchase price under a repo or to return the collateral under a stock loan. We do not know the size or volume of the securities at stake, but it is no doubt potentially very substantial, such as to justify this heavy litigation.

16. As I say, the Rascals process was internal to the group, and while the group was trading it did not matter to anyone else, save that it enabled LBIE to present itself to its regulator in a way which required less rather than more capital by way of capital adequacy compliance.

The Rascals transactions were in one sense unreal or artificial. No money passed either way. According to LBIE, even if (contrary to its primary contention) title ever moved to the affiliate at all, it came back to LBIE at once under the first repo and stayed with LBIE continuously until a sale to the street. The succession of repos, day by day, in effect refixed the price of the securities within the group, so as to avoid margin calls, but did nothing else. According to LBF, the title came to it on the initial purchase, but it bounced between LBIE and the affiliate every day under the succession of repos, resting with LBIE overnight but with LBF for part of each day. Real money was paid at the outset, on acquisition from the street. Real money would be received on an eventual sale to the street. In the meantime everything was dealt with by book entries.

17. While the group was solvent and trading this did not matter. Once insolvency supervened, it came to matter greatly, because the different group companies have different creditors. It is therefore necessary to consider the effect of the transactions and dealings between the parties on a strict basis, recognising the different position and interests of the different corporate entities, while also recognising that the transactions and other dealings were undertaken in the course and context of group operations undertaken, broadly speaking, for the benefit of the entire group. The judge said this at paragraphs 49 and 50 of his judgment:

"49. The Group sought to present itself to the world, and to organise itself internally, as a single integrated business enterprise, rather than as a collection of separate legal entities all pursuing their own affairs in isolation from each other. Nor were its separate legal entities confined to trading only in their countries of incorporation. Many of them, including all but one of the parties to this application, carried on business activities on a global rather than merely national or regional basis.

50. Nonetheless, the tendency of financial services regulation to operate on national lines, the differences in national fiscal systems and the requirements of those dealing with the Group as clients, customers or trading counterparties meant that, for numerous purposes, the identity of Group companies as separate legal entities with principal places of business in particular jurisdictions was of unavoidable importance, both as a matter of internal organisation and external dealings."

18. The ultimate parent company of the group was Lehman Brothers Holdings Inc. (LBHI), a Delaware corporation with headquarters in New York. It provided a treasury function, including day to day cash management across the entire group. It is a party to one of the agreements relevant to this appeal. It commenced proceedings under Chapter 11 of Title 11 of the US Bankruptcy Code on 15 September 2008.

19. LBIE, an unlimited company incorporated in England, was the group's hub company in Europe and thus the principal trading company in Europe. It traded in securities for its own account, for affiliates and for its own external clients. It maintained depot accounts with depositaries, including Euroclear; these accounts included house accounts and segregated accounts. All trades for affiliates, as well as those on its own account, were settled into house accounts. It went into administration on 15 September 2008.

20. LBF is a Swiss company whose core business was to enter into over the counter equity derivative transactions, either directly with the street or via other group companies on a back to back basis. It carried on half of the group's business of that kind by 2008. However, it was a small organisation as such, with only three directors, all of them non-executive, and only some dozen staff exclusive to it. Its day to day trading activities were carried out for it by group staff employed by and working elsewhere, mainly outside

Switzerland and primarily at LBIE's premises in London, on a non-exclusive basis.

21. At all material times, LBF enjoyed a beneficial status under Swiss law, and it was a priority for it to preserve this. It was not subject to regulation by the Swiss Financial Market Supervisory Authority, nor did it hold a banking licence. Its customers included both other affiliates and also professional market participants from the street, all over the world. Because it did not need to be regulated, it did not incur any regulatory capital charge. It also enjoyed a valuable exemption from Swiss stamp tax in relation to its dealings in securities for hedging purposes. Its hedging activities required it to take both long and short positions in securities from time to time. These activities were undertaken for it by (relevantly) LBIE, using LBIE's depots.

22. LBF was placed into a Swiss bankruptcy process on 22 December 2008.

23. Like the judge, we were assisted by a statement of agreed facts, from which I have taken some of the material already set out. Since the business records maintained by the group played a significant role in the argument, I will quote the material in that statement which describes the relevant records:

"5.1 The book-keeping of the Lehman Group was largely automated.

5.2 The International Trading System ("ITS") was the Lehman Group's main securities trade settlement system for securities (both fixed income and equities) settled in Europe and Asia. Trades involving such securities were settled by LBIE for the Books of the Respondents and were recorded on ITS. ["Books" is a defined term – see below.]

5.3 ITS recorded trades and settlements. It generated trade tickets for acquisitions from the Street and included functionality to record the RASCALS process.

5.4 Following each business day, ITS would commence its overnight "batch cycle", the purpose of which was, amongst other things, to complete the processing and reporting of the trading activity booked during the day and to prepare ITS for the next business day. Activities carried out within the cycle included the processing of the transactions booked into the system during that day and the passing of the ITS entries to the general ledger for the Lehman Group, known as DBS.

5.5 At a certain point in the batch cycle, one business day would be effectively closed on ITS, and another one would be started. During its operation, ITS created a series of accounting debit and credit entries. In respect of any transaction, ITS would create entries relating to the trade date, the expected settlement date, and, finally, the actual settlement date. Both the trade tickets and the accounting entries generated in ITS were generally accessible by any ITS user. Each of the Respondents was an ITS user.

6.1 On the trade date of a trade to be settled by LBIE with the Street of a securities position for a Book of a Respondent, an entry was posted on the Respondent's inventory account in respect of the securities position. On the settlement date a corresponding entry was posted in the unsecured intercompany ledger which indicated that the Respondent was indebted to LBIE in respect of the purchase price for the securities position."

24. The word "Books" used in paragraph 5.2 of the agreed statement, quoted above, was defined in section 3 of the statement:

"3.2 The Lehman Group trading function was split across separate trading desks each of which specialised in trading a particular type of security or derivative product ("Desks"). The Desks were not structured or labelled on an affiliate-by-affiliate basis. Rather, each Desk was geared around investment expertise in a particular class of securities or derivatives.

3.3 Typically, each Desk would be further split into a number of specialist trading books ("Books"). Each Book was allocated to a company within the Lehman Group."

25. Another important feature of the way in which the group organised its affairs was the treasury function operated by LBHI, through two branches, one in New York and the other in London. Again, I quote the description of this operation from the statement of agreed facts.

"7.2 LBHI NY sat at the top of a funding chain for the entire Lehman Group and acted as the central "banker" providing daily funding for the other affiliates' business activities across the globe in so far as required. Generally, but subject to exceptions, cash funding was sourced from, and available cash surpluses were returned to, a single USD-denominated bank account, held in the name of LBHI NY with Citibank in New York (the "LBHI NY Account").

7.3 The calculation and funding of cash requirements for affiliates transacting business in Europe were provided by LBHI UK, which in turn received funds to do so from the LBHI NY Account.

7.4 LBHI UK operated and maintained its own USD bank account with Bank of America in New York (the "LBHI UK Account"). In the event of available cash surpluses arising on the accounts in Europe at the end of each day, these were passed up the funding chain into the LBHI UK Account and from there to LBHI NY.

7.5 On a daily basis the LBHI NY Account would provide the required funding of the LBHI UK Account which, in turn, was used to fund part of the affiliates' cash requirements in Europe.

7.6 An estimated amount of the funding required by LBHI UK would be notified the preceding day, typically by email, from Cash and Collateral Management (CCM) in London to CCM in New York. Throughout the following business day, all of the expected and actual cash flows funded by LBHI UK Account would be aggregated in Global CCM. By the end of the day, and on a net accumulated basis, the LBHI UK Account would have built up either a surplus or a deficit which CCM in New York would fund to a (near) zero balance from the LBHI NY Account. In the event of an anticipated available surplus, typically such surplus would be transferred from the LBHI UK Account to the LBHI NY Account: if there were an anticipated deficit, there would be a transfer in the opposite direction.

7.7 To assist this process, excess liquidity would generally be passed back up through the Lehman Group's accounts towards the end of the European trading day: that is, available surplus cash amounts would be exchanged into USD amounts and transferred back to the LBHI UK Account, for subsequent transfer back to the LBHI NY Account."

The issues on the appeal

26. LBIE claims that it has the beneficial title to all securities to which the Rascals process was applied and which remained in its depots, to the exclusion of LBF, even though the securities were acquired for the account of LBF. Conversely, LBF claims beneficial title to all such securities as were acquired for its account.

27. LBIE contends, first, that the Rascals process was not intended to, and could not as a matter of law, transfer a beneficial title to the relevant securities to the affiliate. The judge decided this in favour of LBF. It is the subject of LBIE's Respondent's Notice.

28. Failing that, LBIE argues that the beneficial title returned to LBIE under the first repo entered into under the automatic Rascals process, and that it remained vested in LBIE throughout thereafter, unless and until the securities were sold back to the street. The

issues arising on this part of the case are these.

29. Given that the terms of the repo were for payment against transfer of title, did LBIE pay the price on the on-leg of the first repo? LBIE contends that it did so by offsetting against that price the debt owed to it by LBF in respect of the acquisition price paid by LBIE to the street. LBF, however, argues that there was no such debt, for transactions after June 2000, because of the terms of an agreement entered into at that time between LBHI, LBIE and LBF. LBIE disputes this and also argues that, even if this were strictly the case, LBF is estopped from saying so. LBIE also relies, in the alternative, on estoppel as regards its payment of the on-leg price.

30. LBIE further argues that, once title had passed back to it under the first repo, it remained vested in it throughout. This was known below as the "cradle-to-grave" proposition. On that basis, title was still vested in it at the end of the day, especially as LBF could not and did not pay the price under the final off-leg. LBF denies that, pointing to the pattern of successive repos, with a gap (both in theory and in reality) between each, during which periods title, it argues, must have revested in it. It contends that, at the end of the process, either title was in fact vested in it, because the critical moment occurred between the settlement of the off-leg of one repo and the opening of the next, or it became vested in it on the settlement of the final off-leg. That settlement is shown as having occurred by book entries and, although it is common ground that no money passed at that time, LBF argues that actual payment was habitually waived on each successive repo, and that the same habitual waiver would have applied to the last off-leg just as much as to every previous one.

31. LBF also argues (expressly by way of concession, but it is a contention as well as an admission) that LBIE would be entitled to a lien (or a right of that nature) for the unpaid acquisition price. That point gives rise to a procedural complication to which I will refer later.

32. Separate issues arise out of what happened after LBIE went into administration. Briefly, the facts are these. On the day of the administration order the administrators gave an instruction (referred to as the blanket instruction) to LBIE's staff to the effect that no trades or other transactions were to be entered into without the consent of the administrators. During the afternoon on 16 September 2008 LBF notified LBIE of the termination of all inter-company agreements. LBIE was not authorised to act as agent for LBF after that. However, the automatic Rascals process continued until 23 September because no action was taken to bring it to an end. On that day, without prior reference to the administrators, an employee of LBIE changed the tags in respect of all securities which had been treated as eligible for the Rascals process, so that they were no longer so eligible. The result was that, once the ITS system had recorded the settlement of all off-legs on that date in the ordinary way, no further repos were entered into thereafter. The system therefore recorded unsecured liabilities of the affiliate to LBIE to pay the off-leg repurchase price to LBIE, with no offset in respect of LBIE's liability to pay the on-leg price under the next repo, because there would be none. One issue is whether the apparent settlement of the final off-leg is to be regarded as effective, in the absence of real payment.

33. A separate issue, if 23 September 2008 is the relevant closing date, is whether the change of the status of the tags, with the result that I have described, is affected by paragraph 64 of Schedule B1 to the Insolvency Act 1986, as being the exercise of a management power without the consent of the administrators, and if so what are the consequences of that.

34. For securities which were subjected to the manual version of Rascals, the same issues

arise as to the effect of what was done at the start of the process. Since the off-leg for the stock loans did not occur automatically, and no-one took steps to make it happen at the end, the dispute turns on the issues arising at the outset.

35. Thus, the issues on the appeal can be divided into the following groups:

i) First, the issues arising on the Respondent's Notice, as to whether beneficial title ever reached LBF;

ii) Secondly, the question whether LBIE paid, or is to be treated as having paid, the price on the on-leg of the first repo; this includes LBF's argument that it never owed LBIE anything on the original acquisition, because of the 2000 agreement already mentioned, and the points as to estoppel;

iii) Thirdly, the issue as to continuity of title;

iv) Fourthly, the points arising specifically as to the final off-leg, which is affected both by the third point and also by the specific matters mentioned above as to the letter dated 16 September 2008 and as to what was done on 23 September 2008.

v) The first two of these apply to the product of manual Rascals as well as to that of automatic Rascals; the third and fourth only apply to automatic Rascals.

Issues of lien

36. It is convenient to mention the position as regards the argument about lien at this stage. On 25 January 2010 the judge held a directions hearing in these proceedings. As a result he made an order which included this paragraph:

“The Court shall not determine, on this Application, issues which would otherwise arise out of paragraphs 3 and 4 of the Application, going to whether or not LBIE or any other person has a lien over the securities which are the subject matter of the Application.”

37. In the course of that hearing (of which we were shown the transcript) there was debate as to what issues concerning lien should be hived off from these proceedings and deferred to the hearing of other proceedings in which they would be raised. Mr Milligan invited the judge to hive off points of construction on various documents on which there might be an argument about lien, but not what he called equitable lien, a point of legal principle not dependent on issues of construction. However, the judge's order did not distinguish between one kind of lien and another. No such point is to be decided in the present proceedings, as the judge noted at paragraph 216 of his judgment. We were told that there are other proceedings pending in which the lien issues depending on construction will be decided, but that these do not include any other argument about lien that might arise from the Rascals processes.

38. The effect of the judge's order of 25 January 2010 is that no issue of lien could be determined by the judge in the judgment from which this appeal is brought. It follows that no such issue can be decided on this appeal either. If such an issue were to be relevant to the outcome of the appeal, then it would be necessary to express only a contingent conclusion, subject to the resolution of the lien issue, and to refer or remit the proceedings back to the judge for that point to be decided.

The relevant agreements

39. The documentary evidence before the judge included a number of papers about the Rascals project prepared in 1995. The adoption of the process led to an agreement being entered into between LBIE and LBF called the Inter-Company Repurchase Agreement (ICRA) dated 15 March 1996. It is a facultative agreement, regulating the routine making of repos and stock loans as between

the parties. It includes the following recitals:

"WHEREAS each Party may settle securities transactions at the request of the other Party and, as a consequence of these transactions, may hold securities on behalf of the other Party;

WHEREAS all parties wish to ensure that security and monetary balances arising between them from such settlement are properly secured;

WHEREAS the parties are or may become subject to capital adequacy and other regulations under the various jurisdictions in which they operate;

WHEREAS the parties wish to ensure both that there can be no doubt about adherence to regulations relating to the custody of assets and that there is no doubt about their treatment for regulatory capital purposes of the inter-company balances arising from these settlements;

WHEREAS the parties consider that the most appropriate way in which to resolve this is to enter into repurchase, sell/buy-back or stock loan transactions in respect of securities held by one party but owned by another."

40. It provided in clause 1 for the parties to enter into transactions of sale or loan of securities against the exchange of the payment of the purchase price or cash collateral, with a simultaneous agreement to sell back or to return the securities. The Holding Party was to determine what form the transaction would take. The latest version of the industry standard agreement would apply. The clause continued as follows:

"Where a Party is holding securities (the "Holding Party") on behalf of the other Party (the "Owning Party"), the Holding Party may, in its discretion and by notice to the Owning Party buy or borrow the Securities, in which case the Owning Party shall pass full legal and beneficial ownership in the securities to the Holding Party against receipt by the Owning Party of purchase monies (in the case of repurchase or sell/buy-back transactions) or collateral (in the case of stock loan transactions). Both Holding Party and Owning Party agree that the Owning Party shall be obligated to repurchase or accept return of the Equivalent Securities, at a price to be agreed by the Holding Party and the Owning Party ..."

41. Clause 4 provided for the Holding Party to pay to the Owning Party the amount of any income payment received during the term of a particular transaction. Clause 5, headed Netting, was as follows:

"All parties hereto agree on an ongoing basis that all obligations of the Owning Party to Holding Party and vice versa shall be calculated on a net aggregate basis. It is agreed that all securities and cash owed by Holding Party to Owning Party shall be set off against the obligations of Owning Party to Holding Party. For the purposes of calculating the net aggregate exposure pursuant to this section the value of any securities purchased, lent or provided as collateral shall be the value determined by the Lehman Brothers ITS system. The claims of the Owning Party to the Securities is to be set off against the claim of the Holding Party to the payment of money for the Securities."

42. The agreement was to remain in force until terminated on 7 days' notice in writing. It was governed by English law.

43. That agreement had been in force for four years, governing the transactions entered into under the Rascals process during that time, when the next relevant agreement was made. This is the Inter-Company Funding Agreement dated 5 June 2000, between LBHI, LBIE and LBF (ICFA). It is a short agreement and it is not necessary to consider more than the recitals and clause 1. The recitals are as follows:

"WHEREAS LBF is a Swiss Limited company trading in equity and other derivatives and investing in securities to hedge exposures arising from derivative transactions.

WHEREAS LBIE is a member of the Securities and Futures Authority and is authorized to carry on investment business in the United Kingdom under the Financial Services Act 1986.

WHEREAS LBIE acts as settlement agent for LBF in certain of the derivatives and securities transactions noted above.

WHEREAS LBHI can provide treasury services to any Lehman Brothers group company."

44. Clause 1 was as follows:

"1. Funding and Settlement

LBIE agrees to settle such securities transactions as LBF requests it to: and LBHI agrees to provide funding to LBF to permit LBF to provide funds to LBIE to effect settlement transactions on behalf of LBF. LBIE will hold funds provided by LBF on deposit for LBF as requested by LBF from time to time.

For the avoidance of doubt, any loans under this agreement are provided directly from LBHI to LBF and at no time will LBIE be regarded as lending to LBF."

45. This agreement too was to remain in force until terminated by 7 days' notice, and it too was governed by English law.

46. The judge accepted that LBIE acted as broker and settlement agent for LBF, by virtue of these and other agreements. That is not in dispute as such on the appeal, but LBIE does argue that, in the particular circumstances prevailing in relation to the Rascals process, LBIE did not hold the title to the securities acquired on trust for LBF. Although LBF was to enjoy the economic risks and rewards of ownership of the securities, this was to be achieved without actual ownership. The judge put the point neatly at paragraph 27 as follows:

"[LBIE says] that the objective common intention of both LBIE and its affiliates was that the affiliates should obtain the economic risks and benefits of an owner of the underlying securities not by the transfer of ownership (in the sense of a proprietary interest) but by the creation of purely contractual rights and liabilities between LBIE and the affiliates having the same economic effect, as it were, synthetically."

Dealings with the securities

47. An important part of LBIE's case is based on the way in which, with the consent of LBF, it dealt with the securities in question. I have mentioned that it settled acquisitions into house accounts, where they were not segregated from other securities of the same type, acquired for other affiliates or for LBIE's own account. Having acquired them, it used them (until sale back to the street) freely as part of its own business assets, accounting to LBF, or any other relevant affiliate, for any dividend or coupon and eventually for the proceeds of resale, but not for any benefit obtained by short-term dealings in the meantime.

48. As such it might use securities in a number of different ways. It might lend them to the street by way of a repo or a stock loan. Or it might use them to satisfy obligations under a sale contract, having already sold short for hedging purposes. As the judge pointed out at paragraph 75, in an example oversimplified for illustration purposes, LBIE might on the same day acquire a given quantity of one security for LBF and sell the same quantity of the same security in order to satisfy an obligation of another affiliate under a short contract previously entered into. It would not deny that it had acquired the securities for LBF, and that it was accountable (under contract) accordingly, but it would not, at the

end of that day, in fact hold the securities in question at all in its depot. The judge said that the position was no doubt much more complicated in practice, but the point remained that at the end of a given day LBIE would not necessarily hold in its depot all the securities that it had acquired for LBF and for other affiliates and had not yet disposed of finally on a resale to the street. It would, however, have other rights, for example (in the case of a repo or stock loan) the right as against the third party to the return of the equivalent securities by way of the off-leg. Such rights would represent the securities originally acquired.

49. As I have mentioned already, the vast majority of the securities dealt with in this way were dematerialised, not being represented by any certificate or other document. Instead they were represented by rights as against the depositary, and were acquired or disposed of by way of changing the relevant entry in the depositary's records. Even in the small minority of cases where there was a certificate, it was, as like as not, held by a nominee so, again, the relevant rights were rights as against the nominee. That, however, does not affect the arguments either way. So long as it is understood that when one speaks of acquiring or disposing of securities in the context, one means dealing with rights as against a depositary (directly or indirectly) who holds the relevant securities, and indeed other securities of the same type, it makes no difference to the legal analysis.

The Rascals project

50. The agreements from which I have quoted, and others, provided the framework for the implementation of the Rascals project. The person within the group who was mainly responsible for devising the Rascals project was a Mr Oliver Backhouse, who has since died. His supervisor at the time (1993-5) had been Mr Thomas Bolland, who gave evidence to the judge. The nature of the plan and the motives and intentions behind it were disclosed also by a number of documents produced at the time. The judge said of this contemporary written material, at paragraph 89:

“First, it demonstrates, at least from LBIE's perspective, the problems which the Rascals processes were designed to address and at least LBIE's purposive intention in constructing and then operating the Rascals processes. Secondly, those documents demonstrate that LBIE's thinking in this regard was sufficiently ventilated within the Group for it to be improbable that any affiliate which subsequently participated with LBIE in Rascals processing could have been unaware of LBIE's purposive intention, or of the problems which the Rascals processes were designed to address. Thus, the purpose or intent behind the Rascals processes may properly be described as having been mutual, even if they were processes aimed at dealing with LBIE's particular problems as a hub company.”

51. The judge went on to record at paragraphs 90 to 95 four particular points which he said emerged from the documents. The following summary borrows largely from the judge's own words.

i) The documents display a clear underlying assumption that one effect of LBIE's settling the acquisition of a security from the street for the account of one of its affiliates was to confer upon the affiliate beneficial title to the security, even though LBIE invariably settled it into one of its un-segregated house depot accounts. Mr Bolland said he was of that view, though some colleagues considered that title would not pass to the affiliate except upon actual payment of the acquisition price by the affiliate to LBIE.

ii) A primary purpose of the Rascals processes was that the affiliate should thereby confer absolute title to the underlying security upon LBIE, to the exclusion of any continuing beneficial interest of the affiliate. This was perceived as essential if the problems thrown up by the global settlement practice were to be

satisfactorily addressed. Full title to the underlying securities was necessary to give LBIE an effective security as against its affiliate so as to avoid the capital charge problem. Without it, neither the segregation problem nor the financing problem would be resolved. In fact, the latter two problems were probably less real than they were thought to be, not least because the segregation point was covered, until about 2007, by an exception for inter-group dealings. Capital adequacy had not been a problem, but it would become so at the beginning of 1996 when the European Capital Adequacy Directive came into effect. The objective behind Rascals was to bring about a continuous beneficial interest of LBIE in the underlying security, to the exclusion of the affiliate, for as long as the security was the subject matter of a Rascals process, whether by a stream of daily repos or by an open-ended stock loan.

iii) As a matter of purpose and intent, the Rascals processes were conceived of as effecting a transfer of beneficial title from the affiliate to LBIE despite payment for the first repo (or collateral for the stock loan) not being effected by cash settlement as between LBIE and the affiliate. Payment was to be effected by book entries, coupled with offset against the affiliate's unsecured debt to LBIE for the original acquisition price of the security from the street. That this was to be the method of payment is spelled out in the contemporaneous documents.

iv) The contemporaneous material provides no guidance as to subjective intent in relation to beneficial ownership in the event that the Rascals process should be terminated, not by the eventual resale of the security to the street, but by events triggered by the insolvency of one or both of the parties to the Rascals transactions. This is not surprising, but it is inherent in the capital charge problem, and in the solution that LBIE should become in effect a secured creditor of the affiliate, that a purpose of the Rascals process was to confer security upon LBIE in the form of beneficial title to the underlying stock in the event of the affiliate's insolvency.

52. As regards the implementation of the Rascals project as between LBIE and LBF, apart from the relevant agreements to which I have referred, the judge described what happened in practice at paragraphs 162 to 186. Again I can set out a summary with quotations or near quotations.

53. When LBIE acquired securities from the street for LBF's account, ITS would generate two trade tickets on the trade date (i.e. the date of the contract to purchase the securities): a ticket recording the essential terms of the contract with the street counterparty, and another recording a back-to-back sale of the same amount of the same securities by LBIE to LBF with the same settlement date and the same price. This led to entries being made within ITS in the books of LBIE and LBF. LBIE's stock inventory system would show a (momentary) long position in the securities with a corresponding unsecured debt due but not yet payable to the street counterparty. LBF's stock inventory account would show a long position in the securities, with a corresponding unsecured debt due but not yet payable to LBIE in its pending transactions inter-company account, for the same amount.

54. On the settlement date, LBIE had to pay cash to the street counterparty. That payment was recorded in LBIE's books, which thereafter showed LBIE as the holder of the securities. Disregarding the Rascals process, for the moment, the accounting records of LBIE and LBF showed LBF as owing LBIE an unsecured debt for the acquisition price, due and payable, which had been transferred from the pending transaction inter-company account to the unsecured inter-company account. LBF's stock records showed it as having a long position in the relevant securities; LBIE's showed its long position as allocated to its inter-company account with LBF.

55. If the securities acquired were within the category of those tagged on the computer system as eligible for Rascals processing, the ITS system would, on acquisition (thus, on the settlement date), generate a deal ticket setting out the essential terms of a one day repo, and separate trade tickets for each leg of the repo. These two trade tickets led to further entries in ITS. The on-leg showed an unsecured debt owed by LBIE to LBF, the amount being the marked to market value of the securities on that day. This was booked to the same account as showed LBF's debt owed to LBIE for the acquisition price. The off-leg was represented by a secured debt owed by LBF to LBIE for the repurchase price, payable on the next day, the amount being the same as that of the on-leg plus an interest charge payable by LBF.

56. Thus, overnight at the end of the settlement date, the accounting entries as regards inter-company debts showed (1) an unsecured debt from LBF to LBIE for the acquisition price (2) an unsecured debt from LBIE to LBF for the price payable on the on-leg of the repo (the marked to market value on the securities on that day, which might or might not be the same as the acquisition price) and (3) a secured debt from LBF to LBIE for the price payable (the next day) on the off-leg of the repo, being the same as the on-leg plus the interest charge. If, as it happened, the marked to market value was the same as the acquisition price, the two unsecured debts would match exactly. If the value had gone up between trade and settlement, the debt payable to LBF would exceed the acquisition price and so the debt payable the other way, and vice versa if it had gone down.

57. On the next day, on which the off-leg of the first repo was to be settled, as the judge said at paragraph 170:

"accounting entries were made to reflect the settlement of the off-leg of the first repo, the settlement of the on-leg of the second repo, together with the secured liability of LBF to pay LBIE for the settlement (on the following day) of the off-leg of the second repo. Any change in the marked to market value of the security would be reflected in the prices payable and repayable under the second repo and, again, the off-leg purchase price would have added to it a one day interest or financing charge payable by LBF."

58. I will not attempt to paraphrase or summarise his description of the position thereafter:

"171. Thus, LBF's obligation to pay for the settlement of the off-leg of the first repo was transferred from secured to unsecured inter-company account, where it would be largely offset by LBIE's obligation to pay for the on-leg of the second repo, differences in marked to market values being reflected in a corresponding change in the unsecured inter-company balance between LBIE and LBF. LBF's secured liability to pay for the off-leg of the second repo would be recorded in the secured inter-company account. Viewed as at midnight at the end of the second day, LBF's secured liability to LBIE (in respect of the off-leg of the second repo) would therefore have changed from the amount shown as a secured liability at the end of day one, in line with any change in the marked to market value of the security.

172. Accounting entries reflecting daily repos of the type which I have described continued to be made throughout the period between the acquisition of the security from the street and its ultimate re-sale to the street. It is unnecessary to describe them in any detail. Their overall effect was to show LBIE as the secured creditor of LBF, albeit in constantly changing amounts, in respect of the continuous succession of off legs.

173. On the trade date for the re-sale to the street, a short position would be recorded in LBF's inventory account, off-setting the original long position recorded on the trade for the acquisition. Daily repos would continue

between the trade date and the settlement date for the re-sale to the street. No new repo would be entered into between LBIE and LBF on the settlement date. Thus, on that day, LBF's secured liability to pay for the last off-leg would be transferred to unsecured inter-company account and largely off-set by LBIE's obligation to account for the proceeds of sale received from the street counterparty, subject to movements in the marked to market value of the security between trade date and settlement date."

59. In the case of securities which were not eligible for automatic Rascals, but to which the manual version of Rascals was applied, a somewhat similar process was undertaken, except that, because the stock loans were open-ended, the system was applied once, at the outset, and what happened at the end does not matter for present purposes. The manual version was applied on the settlement date in some cases, but not always, so the judge had also to consider the position if it was applied significantly after the settlement date. It is not necessary to go into the details of this at this stage.

60. What is important, for this purpose as well as for the automatic process, is the monthly pay-down. LBF had no relevant bank account of its own with which to settle unsecured inter-company balances. The judge described what happened as regards such balances at paragraph 184:

"At the end of each month, temporary journal entries were made reflecting a netting, as between LBIE and LBF, of all unsecured inter-company balances, and the novation of the resulting net balance to LBHI. By that I mean that LBHI was interposed between LBF and LBIE, so that any net debt on the unsecured inter-company account owed by LBF to LBIE was replaced by a debt from LBF to LBHI, and a debt from LBHI to LBIE. If the net balance was owed the other way, LBIE would owe LBHI, and LBHI would owe LBF."

61. This month-end process settled any unsecured balances as between LBIE and LBF, either way. It did not settle what were recorded as secured balances, e.g. LBF's debt to LBIE on the off-leg of any open repo or stock loan.

Did beneficial title to the securities remain vested in LBIE?

62. Logically, the analysis should start with the issues raised by the Respondent's Notice, to the effect that the beneficial ownership of the securities, which passed to LBIE on acquisition from the street, never left LBIE thereafter in favour of the affiliate. Two grounds are advanced: first that there was no intention that title should so pass, and secondly that, even if there was, it could not do so effectively because the trust under which LBIE would hold the benefit of the securities for LBF lacked the necessary certainty of subject-matter.

63. The judge started his analysis by considering the position as it had been before the Rascals system was introduced. He held, at paragraphs 266 and 274, that at that stage, even though LBIE was acting as agent or broker, not as principal, the basis on which LBIE acquired and dealt with securities for the account of affiliates was not such as to give the affiliates proprietary interests in the underlying securities. I do not need to go into his reasons for those conclusions. No party challenged them.

64. That finding was an important element in Mr Milligan's argument that nothing changed in this respect when the Rascals system was introduced. Of course, if it had not changed, and if that position had been appreciated by all concerned, the worry about capital adequacy would have been seen to be unnecessary. If LBIE retained the absolute beneficial title throughout, from acquisition from the street until resale, then there was no capital adequacy issue because LBIE would be a secured creditor of the relevant affiliate for the

acquisition price. Mr Milligan submitted that the Rascals process was applied only on an “in case” basis, to make doubly sure that the feared problem did not arise, and that the sequence of contracts involved in the automatic Rascals process should be seen as contingent and, in his word, “synthetic”, rather than representing the legal and intended reality of the situation.

65. The judge rejected that argument, and so would I. So far as understanding and intention is concerned, the prevailing assumption in LBIE was that the affiliate did acquire a beneficial interest, even before Rascals, the uncertainty being as to whether that acquisition was conditional on payment. The agreements relevant to Rascals show no uncertainty as to whether the affiliate obtained a proprietary interest in the securities. On the contrary, the fact that the affiliate did obtain such an interest, and then disposed of it back to LBIE under a repo or stock loan was of the essence of the Rascals scheme.

66. Mr Milligan criticised the judge for failing to give proper weight to words in the ICRA which, he argued, showed that it was contingent, and was intended to resolve doubts. I have set out the relevant recitals in the agreement at paragraph [39] above. It is true that the word “may” appears in them on a number of occasions. Mr Moss submitted that all this shows is that which is not in doubt, namely that the agreement is facultative. It provides for what is to apply if advantage is taken of it. Mr Milligan relied particularly on the second recital as showing that even if one party does settle securities transactions at the request of the other, it “may”, as a consequence of those transactions, hold securities on behalf of the other, rather than that it will do so. I accept Mr Moss' submission on this point, that all this shows is that the effect of the particular transactions will depend on the terms of those transactions, not on those of the ICRA alone. I find nothing in the arrangements as regards Rascals that casts doubt on the judge's conclusion that a beneficial title was to pass to the affiliate, which would then be passed back to LBIE by way of the repo or stock loan.

67. Before I move to the argument about certainty, which is the second of the grounds in the Respondent's Notice, I must also refer to a variant of it which Mr Milligan prayed in aid in support of his argument as to lack of any common objective intention that there should be a trust. Because LBIE was to be free to deal with the securities as if they were its own property (while remaining liable to account to the affiliate for any income and for the eventual capital proceeds on a sale back to the street), there might be severe problems of identification and accounting, especially if some or all of the securities of the particular class held by LBIE had been used to meet short positions of LBIE's own or of another affiliate in the meantime. There might well be a shortfall, at any given moment, and he argued that it was entirely unclear on what basis any shortfall was to be borne as between (a) LBF, for example, and first (b) any other affiliate for whom LBIE had held such securities and secondly (c) LBIE itself if it had held some for its own account. As Mr Milligan said in his skeleton argument, “if nothing else, the complexity and unusual nature of the trust found by the judge is another indication that it was not the common objective intention of the parties to create one”. In oral argument he showed us some passages from the evidence which emphasise the complexity of the situation on the ground, so to speak, as it might be from time to time, in order to show how difficult and therefore unrealistic was the proposition that a trust was intended.

68. It is clear that the case of a trust under which the trustee is free to, and does, use the trust assets for its own benefit, in certain respects at least, without accounting to the beneficiary for such dealings, is unusual. It is also clear that in the present circumstances there are likely to be practical problems in unravelling the entitlement of relevant parties under such a trust, once the music stops. Nevertheless I agree with the judge in

declining to hold that this factor is sufficient to show that there was no trust at all because there was no common objective intention that there should be one. For the reasons given by the judge it seems to me that the common objective intention was the other way, namely that the affiliate should acquire a beneficial interest. The practical problems may not have been appreciated, particularly because, so long as all went well, they would not arise.

Certainty of subject-matter

69. The other ground in the Respondent's Notice is that the trust which would be required for LBIE to hold the securities for the affiliate as beneficial owner lacked the necessary certainty of subject-matter. Mr Milligan relied on cases such as *Re Wait*[1927] 1 Ch 606, *Re London Wine Co (Shippers) Ltd* [1986] BCC 121 and *Mac-Jordan Construction Ltd v Brookmount Erostin Ltd*[1992] BCLC 350 to show that, in general, proprietary rights do not attach to an unappropriated part of a larger mass, as, he submitted, the particular holding of securities would almost always have been. The judge relied on *Hunter v Moss* [1993] 1 W.L.R. 934 and [1994] 1 W.L.R. 452, where the court held valid and effective a declaration of trust as to 50 shares in a company with 1000 issued shares of which the person making the declaration of trust held 950. It did not matter that he had not specified 50 particular shares, nor had he segregated them in some way from the rest of his holding. Mr Rimer Q.C., at first instance, held that the principles applying to a trust of tangible assets (as in *Re Wait* or *London Wine Co*) were not the same as applied to a trust of intangibles. He held that the test should be whether, immediately after the declaration of trust, the court could, if asked, make an order for the execution of the trust, which it could only do if the subject-matter of the trust is identified with sufficient certainty. He then held that a declaration as regards a definite number of shares, forming part of a larger holding, was valid, just as a declaration as regards the corresponding proportion of the shares held would have been. He accepted that the trustee's subsequent dealings with the larger holding might leave doubt as to whether the dealings were with his own retained assets or with the trust assets, but said that such uncertainty would not be as to whether a trust had been validly created, but as to whether the obligations to which it gave rise had been properly discharged. The Court of Appeal upheld his judgment with rather briefer reasoning. In principle, on that basis, LBIE could validly constitute itself a trustee of a particular quantity of a particular security, on its acquisition for the account of LBF, even if it held other quantities of the same security for one or more other affiliates, and whether or not it also held some for its own benefit.

70. The judge derived from this case the following proposition, set out in his paragraph 225:

“A trust of part of a fungible mass without the appropriation of any specific part of it for the beneficiary does not fail for uncertainty of subject matter, provided that the mass itself is sufficiently identified and provided also that the beneficiary's proportionate share of it is not itself uncertain.”

71. The judge referred to some other cases in which *Hunter v Moss* has been considered and followed, and observed that the correct approach underlying the decision has not always been identified in the same way. He said that he favoured the analysis that the trust worked by creating a beneficial co-ownership in the identified fund, an approach formulated in *White v Shortall* [2006] NSWSC 1379 and by Professor Sir Roy Goode Q.C. in an article “Are Intangible Assets Fungible?”, [2003] LNCLQ 379.

72. As before the judge, Mr Milligan did not challenge the principle itself, but he argued that it could not apply in the present case where LBIE is free to deal with the securities as it pleases and to mix them with others held for other affiliates or for its own benefit. As the

judge said at paragraph 234:

"At the heart of Mr Milligan's submissions based upon subject matter uncertainty lay the undoubted fact that, at any moment in time, the supposed trust fund consisting of LBIE's house depot account in respect of a specific type of security (such as ordinary shares in ICI) might consist either of shares originally acquired, equivalent shares subsequently acquired by the exercise of rights under a repo or stock loan with the street, or simply shares subsequently acquired by LBIE to make good a shortfall caused by using shares to settle its own or other affiliates' short positions. Furthermore, the fund could (for reasons already explained) consist at a particular moment in time of no securities at all, where all had been used to settle short positions, or all had been lent to the street, so that the only identifiable trust property consisted of LBIE's personal rights to obtain equivalent securities in the future, for example by calling in stock loans or enforcing the off-legs of repos, as against street counterparties."

73. The judge considered that the complexity of the pattern of holding that might exist at any given moment, with securities having been lent to the street or used to settle short positions on behalf of other affiliates, would make life difficult in terms of working out the respective entitlements, for practical reasons, but did not undermine the fundamental position that, when LBIE acquired a given holding of securities for LBF, it held its rights in respect of that holding as a trustee for LBF. Its duties as such trustee were more limited than those of an ordinary trustee, because it did not have to keep the holding segregated, and could not only mix it with other assets, with different beneficial ownership, but could deal with it, on a short-term basis, for its own benefit or that of others than LBF. However, its trusteeship was constituted at once, and difficulties in accounting as a result of what happened later do not subvert the proposition that the securities were held on trust from the time of their first acquisition.

74. On appeal Mr Milligan relied particularly on two points as casting doubt on the judge's conclusion in this respect. The first is that the securities held at any given time by LBIE might well bear no relationship to those in respect of which LBF's beneficial rights were to subsist, even if rights to delivery of securities by the street or by other affiliates were taken into account. He pointed out that the short sale might be by LBIE for its own account. I do not see that this makes any difference. LBIE would have to account to LBF for its dealings with the relevant shares. If those included dealings on its own account, that would be part of the accounting. Presumably even if there were no rights against third parties (to recover the shares on the off-leg of a repo, for example) there would be proceeds of the disposal which were or had been in the hands of LBIE. Quite how that would impact on LBIE's liability, as a result of the accounting, is not a question that we have to, or could, decide.

75. The same answer can be given to Mr Milligan's other point, based on uncertainty of timing within a given day. Difficulties of analysing what happened during a particular day, and of identifying the order of events, do not seem to me to show that there is any uncertainty at the starting point, which is the moment at which LBIE acquired relevant securities from the street for the account of LBF. At that moment, LBIE owned the securities so acquired (as against the depositary), and it held the relevant rights on trust for LBF. It might have been more sensible, bearing in mind the practical problems of sorting out this aspect of the situation at the moment when the music stopped, to have adopted a different approach under which the common objective intention, supported by the relevant paperwork, was that LBIE retained the absolute title to all relevant securities throughout, accounting to affiliates only in contract for the relevant economic benefits, and leaving the affiliates with no beneficial entitlement to the securities at any

stage. That would have solved the capital adequacy problem in a much simpler way than was adopted by way of Rascals. It would also have solved the segregation and title questions. There might have been issues as regards margins, to which a different solution would have been needed. However, this is not what was done, and it seems to me clear that, first, an approach involving the use of a trust binding on LBIE in favour of the affiliate was adopted and, secondly, that despite practical difficulties to which the introduction of the Rascals system could give rise on this basis, there is no ground for saying that the trust could not take effect in law because its subject-matter lacked certainty.

76. Of course, once the automatic Rascals process was under way in relation to particular securities, the system of successive repos was intended to ensure, and to show, that LBIE had absolute title to the securities as purchaser under the repo, free from any beneficial title in the affiliate. But that does not dispense with the need to ascertain the position before the first repo was put in place.

77. For the reasons given above I would dismiss the Respondent's Notice.

Did beneficial title to the securities pass back to LBIE under the first repo?

78. Thus, when LBIE acquired relevant securities for the account of LBF, it held those securities on trust for LBF. It had paid for the securities, and LBF was bound to repay to it the acquisition price under the back-to-back purchase contract entered into at the same time as LBIE contracted to buy the securities from the street. The next thing that happened, in a case to which automatic Rascals applied, was the first repo, involving a sale by LBF back to LBIE, at the marked to market value on that day, to be settled by LBIE, followed by its repurchase by LBF the following day at the same price plus a financing charge. LBIE's case involves the proposition that it re-acquired beneficial title to the securities under the on-leg of the repo. It is common ground that, on the standard form terms which applied to the repos, the passing of title was dependent on payment of the price. One of the issues, therefore, is whether LBIE is to be treated as having paid the price under the on-leg of the first repo.

79. On behalf of LBIE, Mr Milligan argued, as he had before Briggs J, that LBIE was to be so treated because the price so payable was to be set off against the sum payable the other way, by LBF to LBIE, for the acquisition of the securities. Those two figures might be the same, but they might well differ if the marked to market value of the securities had changed since the trade date of the acquisition. If it had gone up, the price payable on the on-leg would be more than the amount payable in respect of the acquisition, so there would not be an exact match, and the whole amount payable on the on-leg could not be off set by reference to the acquisition price. In that event, as I have already described, there would be an unsecured amount due on the on-leg. Leaving that aside, however, Mr Milligan's point was that the amount due one way was to be off set against the amount due the other way, and that this showed that by the end of the day, LBIE was not indebted to LBF, or at most only for an amount referable to the increase in value of the securities. That amount was to be left outstanding as an unsecured liability, adjusted as necessary day by day, and paid at the end of the month in the course of the monthly pay-down.

80. Mr Moss challenges this on two grounds. First he argues that the effect of the ICFA is that LBF owed LBIE nothing in respect of the acquisition, and that any debt in that respect was owed to LBIE by LBHI. Secondly, he contends that, if there were mutual debts, there was no set-off of one against the other and that nothing short of actual set-off amounts to payment for this purpose. I will take the argument about the ICFA first.

The effect of the ICFA

81. Mr Moss' principal argument is founded on the last sentence of clause 1 of the ICFA. I have quoted the clause at paragraph [44] above, but the last sentence is this: “For the avoidance of doubt, any loans under this agreement are provided directly from LBHI to LBF and at no time will LBIE be regarded as lending to LBF”. From that he argues that the parties agreed that LBF was not to be regarded as a borrower from or otherwise indebted to LBIE in respect of anything falling within the scope of the agreement, and that therefore there was no debt from LBF to LBIE on the acquisition which was available to be set off against the debt which LBIE clearly did owe to LBF on the repo on-leg. As to the scope of the agreement, Mr Moss pointed out that it could hardly be wider in relation to transactions relating to securities. LBHI agreed “to settle such securities transactions as LBF requests it to” and “to provide funding to LBF to permit LBF to provide funds to LBIE to effect settlement transactions on behalf of LBF”. Any transaction under which LBIE acquired securities for the account of LBF after June 2000 must be regarded as within the terms of those phrases. Therefore, he argued, the last sentence applied with overriding effect, and LBF could not be said to have owed LBIE anything in respect of the acquisition of any such securities.

82. We were not told of any evidence as to why the ICFA was entered into, and the judge referred to none. On the case put forward for LBF this agreement caused a fundamental change in the application of the Rascals system, but there is no evidence that this was realised even as a possibility, or that its possible implications were addressed within the group. Nevertheless, the agreement says what it does and it is apparently general in its terms.

83. The judge held that clause 1 of the ICFA did not apply to the acquisition from the street of securities which were then subjected to automatic Rascals, because such an acquisition did not require funding from LBF at all, still less from LBHI in substitution for LBF (see paragraph 333). He said that the acquisition was in substance self-funded by LBIE since it used LBF's unsecured obligation to pay for the acquisition from the street as an offset against its own obligation to pay the purchase price on the first repo on-leg, and the secured debt which arose on the part of LBF to LBIE under the repo was not to pay the price of the acquisition from the street but to buy the securities back under the repo.

84. With respect to the judge, I cannot follow him in this reasoning. The acquisition of the securities from the street undoubtedly did require funding. Real money changed hands on that acquisition; someone had to produce the funds to be paid to the street. When LBIE paid those funds to the street, it was using the money to effect the settlement of the transaction on behalf of LBF. Although this was followed, within the day, by the on-leg of the first repo in an automatic Rascals case, that process did not provide the funds used for settlement, both because it was too late for that purpose, and because no funds in fact changed hands at that stage.

85. Mr Milligan submitted that LBIE used its own money, in hand from other transactions, to settle the acquisition price. That is not the basis on which the judge decided the case in favour of LBIE, and it does not seem to me that it is open to us to decide the case in that way. No doubt from time to time LBIE had the funds in hand at the relevant moment with which it could settle the acquisition price. Whether it always did so must be questionable. Moreover, since the spare cash in affiliates including LBIE was swept into LBHI at the end of each trading day, and funds were then made available to affiliates, including LBIE, by LBHI the following day as needed for particular purposes, the identification of the source of any given funds used at some stage to pay for an acquisition from the street might well go straight back to LBHI.

86. I would therefore hold that the ICFA did, on its true construction, cover the settlement of acquisitions effected by LBIE on behalf of LBF, including those to which the automatic Rascals process was then applied. On the face of it, therefore, the ICFA had the effect that LBIE was not to be treated as a lender to LBF in respect of the transactions since June 2000.

The position shown in the book-keeping records

87. It is, however, clear that, whether or not the parties applied their minds to this at all, it made no difference to the way in which the transactions were recorded in the accounting records of LBIE and of LBF (and of LBHI). On that footing Mr Milligan argued that the position as between LBIE and LBF which would otherwise have prevailed under the ICFA was varied or waived, and the previous position continued unchanged.

88. It is clear that the accounting records of the relevant companies showed that nothing had been advanced by LBHI to LBF, nor by LBHI on behalf of LBF, to enable LBF to pay the acquisition price. Mrs Greenway gave evidence to this effect on behalf of LBIE, stating in terms that the accounts as between LBHI and the various affiliates showed no entries such as to indicate a loan by LBHI to the affiliate of the acquisition price of the securities. Evidence relevant to this was also given by Mr Kirkland, a witness for LBF who had been part of the LBHI treasury function team from 2003 until early in 2006 when he moved to become financial controller of LBF, until March 2008. He referred to the ICFA in his witness statement, and said that his understanding was that LBHI provided the necessary funding on behalf of LBF on an unsecured basis. However, he also stated that the general ledger (DBS) of the group recorded the purchase of securities on the basis of LBHI providing funds to LBIE, but that when LBIE bought the securities on behalf of LBF, an intercompany debt was shown as owed by LBF to LBIE for the acquisition price of the securities.

89. He was cross-examined on this evidence. He confirmed that the bookkeeping entries showed that the acquisition was funded by LBIE, not by LBF, and that there was no record of a debt from LBIE to LBHI in respect of the money so used. Debts to LBHI only arose at the stage of the month-end pay-down of any outstanding unsecured liabilities. He also confirmed that LBF's financial statements were prepared on the basis of the bookkeeping records, treating them as correct. To the question: “So far as the intercompany balances and pay-downs were concerned, everybody proceeded on the assumptions that the balances shown in the intercompany accounts were correct?” he said this was correct. Then there was the following sequence of questions and answers:

“Q. When there was a repo or a stock loan, when the transaction was executed in the sense of when the trade was done, the books recorded that there was a secured payable due from LBF to LBIE in respect of either the repo repurchase price or the payable in respect of the return of collateral for the stock loan?

A. That is correct.

Q. Those secured payables were recorded in ITS?

A. They were.

Q. They fed through DBS and ultimately into the financial statements of LBF?

A. Correct.

Q. Everybody proceeded on the assumption that those records were correct and that those sums were secure?

A. Correct.”

90. That passage was not qualified by

anything said in re-examination.

91. On that footing Mr Milligan submitted that Mr Kirkland confirmed that, first, the accounting records were consistent with the prior position and not with that which would have been correct if the ICFA had been applied and, secondly, that the accounting records were treated by all concerned as being correct. On that basis he argued that it was not open to LBF to go back on that shared assumption and understanding, so as to alter LBIE's position retrospectively.

92. Mr Moss accepted that, in terms of the accounting records, what happened before the ICFA as regards Rascals continued to happen thereafter. However, he argued that there was no evidential basis for a contention that the parties at any stage agreed to vary or to waive the contractual provisions of the ICFA as regards the acquisition of securities within the Rascals system. It seems to me that there may be some force in that contention as such. The parties may simply have overlooked the relevance of the ICFA to Rascals transactions, and therefore have ignored it in documenting the transactions. That might not be enough to amount to a contractual variation or waiver. However, it could suffice to give rise to an estoppel, and in my judgment it does. The question of estoppel also requires discussion in respect of the treatment of the repos, to which I now turn. I will come to estoppel at paragraph [105] below, and I will explain why I consider that LBF is estopped from denying that it is and was LBIE's debtor in this respect, despite the ICFA, at paragraph [124] below.

Did LBIE pay the price on the on-leg of the first repo?

93. For the moment I assume in favour of LBIE that, despite the ICFA, LBF owed a debt to LBIE in respect of the acquisition price of the securities. In turn, LBIE owed to LBF the price on the on-leg of the first repo. Under the terms of the repo contract, title passed on payment, so that in order for LBIE to show that it acquired title from LBF, it must show that it paid the price. The judge held that it did so by way of offset of the debt owed by LBF in respect of the acquisition price. Mr Moss criticised this as heretical: there was no set-off, and he argued that there was no such thing as offset which could amount to payment, short of a true set-off.

94. I must therefore deal with the issue of “offset”: both what it refers to in terms of the accounting records and also what it amounts to (or not) in legal analysis.

95. From some sample or illustrative material in the evidence, it can be seen that, in respect of each series of entries (equivalent to ledgers) for each relevant company, what happened was that each event was noted in the appropriate way in succession, but that what did not happen, within the ITS system, was the drawing of a balance as between two different ledgers, one showing a credit and the other a debit as between the same entities. We were told that the net effect was shown in the DBS system, but the ITS system showed an ever lengthening sequence of successive entries in different ledgers.

96. On that basis Mr Moss' argument was that there was never any set-off of a credit against a debit, such as of the acquisition price of the securities against the purchase price under the on-leg of the first repo. Instead the books showed each entry separately (in separate ledgers) and successively.

97. Such entries could not, in his submission, amount to payment of anything. Only if there was an actual set-off of one against another could either be treated as having been paid. “Offset”, according to him, is not a term of any legal significance. The judge used the word offset explicitly on the basis that no net balance was struck at any given stage: see his paragraph 18, cited at paragraph [10] above. At paragraph 329, having referred to that position in the bookkeeping records, he said this:

"But that comes nowhere near displacing a conclusion that the parties intended that the offsetting of those two obligations should have the effect, *pro tanto*, of paying both debts. Where in a single account two parties record successive mutual credits and debits there is in reality only a net debt owing, one way or the other between them, at any particular moment in time: see Wood on English and International Set-Off at paragraph 3-3. This normal conclusion may of course be displaced by a contrary intention where for some reason the parties wished to preserve the opposing debts, but in the present case the evidence as to intention is all one way. Witness after witness agreed with Mr Moss in cross-examination that payment under the repo structure of Automatic Rascals was to be by book entry rather than by cash. A book entry which merely records an unpaid debt pays nothing. But book entries which record offsetting debts and credits sufficiently evidence payment if, but only if, there is an offsetting credit available for that purpose."

98. Mr Moss challenged this conclusion as being a misapplication of Mr Wood's proposition which, he argued, was only propounded in relation to a current account at a bank. That is a fair comment in itself. If the ITS entries are those to which regard should be had, it seems to me that Mr Moss is right about this.

99. However, Mr Milligan advanced a different argument, to the effect that there was a set-off. He relied on Mrs Greenway's evidence as showing that net balances were indeed struck, but at the stage when the relevant entries were fed into DBS, the next level up, so to speak, in the group's accounting and record-keeping system. We were shown a passage in paragraphs 65 to 68 of her third witness statement in which this point was made by reference to a sample series of transactions. Mr Moss' response on that point was that this might be the case in DBS but it is noticeable that there was never any balance struck in ITS, not at any stage (so far as the evidence shows), and that this must put into question the significance of the entries in the separate DBS system. He accepted that, for accounting purposes, one would strike a balance, and argued that DBS was used for the purposes of reconciliations and the preparation of accounting statements, but he drew a distinction between accounting treatment and legal treatment. The fact that the separate ledgers within ITS continued to be prepared without any reference to any balance as having been struck should, he argued, carry greater weight as showing that the various entities intended, for the time being, to preserve the separate indebtedness on each account without treating one as having been paid off by the application of a credit on another account.

100. I have set out at paragraph [23] above the agreed statement of facts as to the significance of ITS and its relationship to DBS. ITS was the main securities trade settlement system for securities settled in Europe and Asia. Overnight the system would complete the processing and reporting of transactions booked during the day. This would include feeding the relevant entries to DBS which was the general ledger for the group. On this basis, Mr Milligan argued that the relationship between these two sets of records was such that the striking of a balance in DBS, by the recording of net entries, could properly be seen as a setting-off of the relevant credits and debits. This was not affected by the fact that the ITS system continued to show the underlying entries unaffected by the netting off effected in DBS.

101. On the face of it, this argument offers a basis for a finding that successive entries were indeed set off against each other in the records of each of the relevant group companies. If that were correct, it would provide a simpler and more orthodox way to hold that LBIE did pay the price on the on-leg than that adopted by the judge.

102. This approach is not reflected in the judge's judgment, for the simple reason that Mr Milligan did not advance it at that stage. That is apparent from his opening skeleton argument at trial, which is with the appeal papers. Nor did the point feature in the Respondent's Notice, as an alternative reason for reaching the same conclusion as the judge did, nor in LBIE's skeleton argument on the appeal. Mr Moss was, understandably, taken by surprise when Mr Milligan promulgated this point for the first time on the second day of the hearing of the appeal. Mr Moss did not object, as such, to the raising of a brand new point on the appeal, and he sought to meet it by submissions on the merits.

103. This argument on the basis of an actual set-off is therefore inconsistent with the way in which the matter was put to the judge and the way in which he decided the case. It was not foreshadowed in any preparatory materials at trial or on the appeal. It emerged like a rabbit out of a hat during oral argument for the respondent on the appeal. As such, the point must be treated with a degree of scepticism and caution. It does not seem to me that enough is known about the relationship between ITS and DBS and the details of the functions of the latter for it to be safe to decide this case by accepting the argument that there was, after all, a true set-off every night, when the DBS system was brought up to date. Not least, I do not think that the court can be sure that, if LBIE had been contending for an actual set-off at trial, it would not have affected in some way the course of the evidence. It seems to me that, if there had been an application to amend the Respondent's Notice by introducing this point (as would have been the proper course) it would by no means necessarily have been allowed. For that reason I am not prepared to decide the case on the basis of Mr Milligan's argument that there was a set-off.

104. Absent a true set-off, it seems to me that Mr Moss is right in contending that an "offset" is not enough to show payment. No reliance was placed on the terms of clause 5 of the ICRA, quoted above at paragraph [41], as being relevant to this issue.

Estoppel

105. The judge considered, in the alternative, Mr Milligan's case based on estoppel by convention, in case he were wrong to conclude that the repo on-legs were effective to transfer the beneficial title to the securities to LBIE from LBF on the basis of payment by offset. This argument is relevant both to this particular point and to the argument about the application of the ICFA and its consequences, already mentioned. I will address the point first as regards the suggested convention relating to payment by LBIE of the on-leg price.

106. The judge adopted as a summary of the principles relevant to establishing an estoppel by convention one which he had set out in an earlier judgment, *HMRC v Benchdollar Ltd*[2009] EWHC 1310 (Ch), as follows:

"(i) It is not enough that the common assumption upon which the estoppel is based is merely understood by the parties in the same way. It must be expressly shared between them.

(ii) The expression of the common assumption by the party alleged to be estopped must be such that he may properly be said to have assumed some element of responsibility for it, in the sense of conveying to the other party an understanding that he expected the other party to rely upon it.

(iii) The person alleging the estoppel must in fact have relied upon the common assumption, to a sufficient extent, rather than merely upon his own independent view of the matter.

(iv) That reliance must have occurred in connection with some subsequent mutual dealing between the parties.

(v) Some detriment must thereby have been suffered by the person alleging the estoppel, or benefit thereby have been conferred upon the person alleged to be estopped, sufficient to make it unjust or unconscionable for the latter to assert the true legal (or factual) position."

107. This was not criticised as such in the submissions before us, and I am content to use it for present purposes. Mr Moss challenged the judge's conclusion on the basis that there were too many different versions of the convention said to have been established by the estoppel, and that the evidence did not allow the conditions about express sharing of the assumption and assumption of responsibility to be found to be satisfied.

108. As regards the first of those points, the judge said this at paragraph 345:

"The convention alleged by the Administrators has been variously put in written and oral submissions and in position papers, either that LBIE paid for the repo on-legs or that, in any event, the repo on-legs were effective to confer absolute title to the underlying securities on LBIE. Since the only challenge to the effectiveness of the repos for that purpose is the alleged absence of payment by LBIE for the on-legs, the two conventions amount in substance to the same thing."

109. Mr Moss said that several versions had been put forward on behalf of LBIE below: in written submissions "that the financial statements and records were right", and in oral argument, first, "that that which was recorded as a secured payable was indeed a secured payable", then "that LBF was estopped from denying that LBIE had paid the on-leg price", or later "from saying that LBIE was required to pay either in full or other than by offset as a condition precedent for receiving title under the repo or stock loan".

110. Mr Milligan contended before us that the common assumption was, at the lowest level, that the intercompany accounts correctly reflected the relationship between the parties, in particular in showing LBIE as a secured creditor of LBF and, at the highest level, that the Rascals process was effective to transfer title to LBIE.

111. Mr Moss had a different point about the presentation of the position as being that LBIE was a secured creditor, by reference to an argument that LBIE had a broker's lien (or its equivalent) over the securities until they had been paid for. That, he argued, would have justified the presentation of LBIE as a secured creditor, even though there would still have been a difference in terms of regulation, because protection by a lien attracts a capital requirement greater than that of an unsecured loan but less than that which applies if the creditor has the full title security coming from holding the beneficial as well as the legal title. If that were critical, it would make it necessary to decide whether LBIE did have a lien, or any right which could be so described, and for reasons already described that could not be decided on the appeal but would have to await a future decision at first instance.

112. In my judgment, the judge was entitled to reach the conclusion which he set out at paragraph 345 quoted above as to the common assumption or convention. He was right to say that the two formulations in that paragraph amount to the same thing. The first of them was one of the ways in which LBIE put its case to him. It seems to me that, in the circumstances of the case and on the evidence – in particular that of Mr Kirkland referred to at paragraph [89] above - he was entitled to accept LBIE's case in this respect. The judge's conclusion is also supported by what he had said about the objective of the Rascals processes, an intention shared by all relevant group companies, at paragraphs 89 to 95 of his judgment, summarised at paragraphs [50] and [51] above.

113. Mr Moss also contended that LBIE had prepared the records, and said that LBF had no responsibility for them. Mr Milligan did not

accept that, and showed us evidence to the effect that the ITS system was developed and maintained by the group's global ITS technology team, based in a number of countries, providing services to the entire group and not linked to any particular company. That point is fairly made. I do not accept that the conclusion as to whether the requirements of estoppel are satisfied should be affected by attributing responsibility for the record-keeping to LBIE rather than to anyone else within the group.

114. The judge's reasoning on the first two points in the summary set out above at paragraph [106] appears in paragraphs 346 and 347 of his judgment:

“346. By the time that any of the securities the subject matter of this application were acquired from the street, LBIE and LBF had for many years been engaging in a Rascals process of daily repos in relation to eligible securities of the same type. The mutual book entries resulting from those repos uniformly describe their effect as making LBIE a secured creditor of LBF in respect of the off-leg purchase prices under every repo. To LBF's knowledge (and with its acquiescence) LBIE had constructed the Automatic Rascals process in relation to those securities as a way of legitimising, from a capital adequacy, regulatory and street lending perspective, the basis upon which it carried out its acquisition, holding, and exploitation of such securities for LBF's book, and on the express basis that this necessitated the conferral upon LBIE of absolute title to the underlying securities, to the exclusion of any proprietary interest of LBF. LBIE's status as LBF's secured creditor appeared both in LBIE's and LBF's accounts, and constituted the basis upon which LBIE considered itself able properly to satisfy compliance with the capital adequacy regime introduced pursuant to the Directive. Both LBIE and LBF benefited from the conduct of the Automatic Rascals process on that basis and, in so far as it was intended thereby to confer the requisite capital adequacy upon LBIE, so did LBIE's unsecured creditors stand to benefit in the event of its insolvency. The conduct of the Automatic Rascals process on an assumption that the on-legs thereby conferred absolute title on LBIE was part of a course of dealing which both preceded and followed the acquisition of the securities which are the subject matter of this application.

347. In those circumstances I consider that the legal requirements for the establishment of an estoppel by convention are satisfied. Having for many years obtained the benefit of LBIE's acquisition from the street for securities for its book, without paying cash up front but on the assumption that LBIE became by the Rascals process a secured creditor, I consider that it would now be unconscionable for LBF to resile from that convention as to the effect of the on-legs of the Automatic Rascals repos. The requirement that the conventional understanding was sufficiently shared between LBIE and LBF, and that LBIE assumed an element of responsibility for it seem to me fully satisfied by their adoption of a mutual system of book-keeping which recorded LBIE as a secured creditor, and by LBF's acquiescence in circumstances where, but for the effective transfer of beneficial title, LBIE would have been unable to satisfy itself that it could continue to act as LBF's agent or broker in the acquisition of securities from the street, consistent with its capital adequacy and regulatory obligations.”

115. Mr Moss submitted that, even on its own terms, this formulation did not meet the requirements set out by the judge, because it did not show that LBF assumed responsibility for the conventional understanding, but only that LBIE did so. Literally this is correct. However it seems to me that in the third sentence in paragraph 347 the judge's reference to LBIE assuming responsibility must be an inadvertent error, for a reference to LBF. A reference to LBIE as assuming responsibility does not make sense in the context. First, the judge had set out the principles in terms which showed that it was

necessary to show that LBF did assume responsibility for the convention. It would be very odd if he then ignored that requirement in his process of reasoning, when setting out the requirement itself as a preliminary to explaining that it was satisfied. Moreover, the third sentence of paragraph 347 goes on to explain the basis for the judge's finding. It speaks of "their adoption of a mutual system of book-keeping"; that must refer to the adoption of the system by both LBIE and LBF. It then refers to LBF's acquiescence in the circumstances described. That must have been stated in order to make good the proposition that LBF not only shared the conventional understanding, but assumed responsibility for it. As the judge said, it was the basis, and the only basis, on which LBIE could continue to act as broker for LBF in acquiring securities from the street, consistently with its regulatory obligations. I therefore conclude that the third sentence should be read as follows:

"The requirement that the conventional understanding was sufficiently shared between LBIE and LBF, and that LBF assumed an element of responsibility for it seem to me fully satisfied by their adoption of a mutual system of book-keeping which recorded LBIE as a secured creditor, and by LBF's acquiescence in circumstances where, but for the effective transfer of beneficial title, LBIE would have been unable to satisfy itself that it could continue to act as LBF's agent or broker in the acquisition of securities from the street, consistent with its capital adequacy and regulatory obligations."

116. It is not altogether surprising that there should be a slip as between two rather similar acronyms in the course of a judgment running to 430 paragraphs. It is not the only one: in paragraph 342 there is a reference to LBSF which is clearly intended to be to LBF. I proceed on the basis that the judge did find that LBF not only shared the conventional understanding, but also assumed responsibility for it.

117. Mr Moss also showed us paragraph 410 of the judgment, which is part of the passage dealing with estoppel in relation to different affiliates. There the judge said this:

"Issues as to whether a person alleged to be subject to an estoppel by convention has sufficiently "crossed the line" as to make itself responsible for the conventional understanding in question normally arise between persons dealing with each other at arm's length. In the exceptional circumstances constituted by the fact that all the potential parties to the convention estoppel here relied upon are co-subsidiaries or sub-subsidiaries of the same holding company, doing business for the benefit of common shareholders, using a common accounting and book-keeping system, and sharing the services of individuals employed on a non-exclusive basis, it seems to be that the necessary sharing or acquiescence is capable of being established by those features rather than, as would be necessary in an ordinary case, by some specific "crossing of the line" between persons dealing at arm's length. Accordingly, although with rather less confidence than in relation to LBF and LBSF, I have concluded that if it had been necessary for the Administrators to rely upon a convention estoppel for the purpose of preventing LBCCA now from denying that the Automatic Rascals on-legs were effective in relation to any proprietary interest of its own in the underlying securities (whether because of want of title or non-payment by LBIE), the Administrators' case in that regard ought to succeed."

118. Mr Moss argued that this passage is revealing of the judge's reasoning on estoppel also in relation to LBF. Mr Milligan challenged that, pointing out that the proposition is clearly different from those set out in the judge's reasoning as regards LBF, and that the judge distinguished expressly between the case which he was discussing at that point in the judgment and the case of LBF. I accept that submission, and I disregard this passage as

irrelevant to his reasoning in relation to LBF.

119. Mr Moss urged upon us the importance, once insolvency exists, of respecting with care the position of different entities within a group structure. He showed us the abbreviated report of *Ford & Carter Ltd v Midland Bank Ltd*, House of Lords 23 May 1979, in the New Law Journal for 31 May 1979 at page 543. In that case the issue was whether a mutual guarantee given by certain group companies to the bank had become binding on another company which had joined the group later. It was evidently the intention that that company should be so bound. Lord Wilberforce, however, said this, on which Mr Moss relied:

"… intention is one thing, obligation is another. When creditors become involved, as they do in the present case, the separate legal existence of the constituent companies of the group has to be respected. In the absence of some contractual act or document they cannot be bound to the bank."

120. That supports a theme which ran throughout Mr Moss' submissions, that it was all very well to suppose that those who implemented and operated the Rascals system intended certain objectives to be achieved, but it by no means follows that they accomplished what they intended. It also supports, more specifically, the proposition, which is not in doubt, that once some or all of the companies in question are insolvent, the position has to be looked at quite differently from how it may appear when all are solvent and trading successfully.

121. It seems to me that the judge did not err in that respect in coming to his conclusions about estoppel at paragraphs 346 and 347, if the latter is read with the correction indicated above. There was evidence on which he could find that LBF as well as LBIE was aware of the position as shown in the records, as he describes in paragraph 346. In particular it was open to him to hold that LBF knew of and acquiesced in the setting up of the automatic Rascals system for the reasons of regulatory compliance already described, and that this required LBIE to hold the beneficial title in the securities. He was also entitled to find that both LBIE and LBF benefitted from the use of the Rascals process in this way.

122. Mr Moss argued that it would not be unconscionable for LBF to resile from the common convention at this stage, now that regulatory compliance is no longer required. It seems to me that this argument is fallacious. Of course, if an estoppel is established as regards a continuing situation, it may be open to one party to withdraw from the common (but inaccurate) assumption for the future, so that future transactions have to be conducted on the correct basis. However, if the estoppel is established, it is not open to one party to withdraw retrospectively, even if the need for the common assumption, on which the estoppel was based, is no longer in place. It would be unconscionable for that party to seek to redefine the basis on which past transactions had been conducted. Accordingly I agree with the judge in his paragraph 347, as corrected above, for the reasons he gives there.

123. On that basis, although I do not accept the judge's conclusion that LBIE paid the price on the on-leg of the first repo by offset against LBF's debt for the acquisition price, nor do I accept Mr Milligan's new argument for a set-off, I would hold that LBF is estopped from denying that LBIE had paid that price by virtue of the estoppel by convention which I have been discussing.

124. For similar reasons, I would also hold that LBF is estopped from denying that it owed LBIE the acquisition price for the securities, and from asserting that that price was owed to LBIE by LBHI by virtue of the ICFA. The records common to all three parties were inconsistent with LBHI being the debtor rather than LBF. Those records were treated by all parties as correct, as Mr Kirkland confirmed. If LBHI had been the debtor it would have been

an unsecured debt for regulatory purposes, and the objective of the Rascals system would not have been achieved. That would make it unconscionable for LBF to go back on their adhesion to the conventional understanding or assumption with retrospective effect.

125. Mr Moss argued that to allow the accounting records to prevail over the ICFA and to produce a result inconsistent with that which would follow from the agreement involves ignoring the last words of clause 1 of the agreement, by virtue of which the agreement was to prevail whatever the records might show. I agree that this is its effect, but I do not accept the submission that this is not legitimate. The application of normal principles of estoppel by convention cannot be excluded by the use in the contractual documents of a provision that the document will prevail whatever may be done in practice. Such a provision may be relevant to a consideration of the issue, but it cannot be conclusive. In the present case it seems to me to carry far too little weight to prevail over the evidence as to the common assumption and therefore to preclude the establishment, on ordinary principles, of the estoppel by convention.

126. Thus, on the first issue arising on the Appellant's Notice, whether title passed to LBIE because it did pay the price on the on-leg under the first repo, I would hold that it did. Although the ICFA, if applied in practice, would have led to a different result as regards securities acquired after June 2000, it seems to me that the parties proceeded on the basis of a convention that LBF was the debtor to LBIE, rather than LBHI being indebted, and that LBF cannot go back on the assumption of that position, being bound by an estoppel by convention. Secondly, LBF is estopped by convention from contending that LBIE did not satisfy its liability to LBF for the price on the on-leg, for the reasons given by the judge at paragraphs 346 and 347 and discussed above.

What happened next? The cradle-to-grave proposition

127. If therefore the beneficial title to the securities passed to LBIE on payment in respect of the on-leg of the first repo, the next question is what happened at the next stage of the process, namely the off-leg of that repo. Mr Moss relied heavily on the fact that, as regards the few days for which we have the detailed evidence, the off-leg was shown as settled at about 2pm and the next on-leg did not open until about 7.30 in the evening that day. So, he said, there was a period of over 5 hours during which title had reverted to LBF. That, however, depends on whether LBF had paid the off-leg price. It is common ground that it did not at any stage pay cash, so the question is whether its obligation was satisfied in some other way, and if so when, or waived, it being common ground that, for both legs of a repo, payment and transfer of title were to be simultaneous.

128. LBF cannot point to anything which happened at the time when the book entry was made showing the off-leg as having been completed which could constitute payment. In practice, LBF's obligation to pay would only be satisfied once it could be offset against LBIE's obligation under the next repo on-leg. Accordingly I agree (in effect) with the judge at his paragraphs 340 and 341 that once LBIE had acquired title to the securities on the first repo on-leg, it kept it continuously through the automatic Rascals process.

129. Mr Moss argued that this was inconsistent with the book entries as regards when the repo was settled, and that to ignore those entries would not stand well with the judge's preference for the accounting records over the legal agreements between the parties. He said that the judge's reasoning involved having it both ways. I reject that criticism. The parties regarded the accounting records as correct as between the companies, not the details of transaction entries one by one during a given day, of which LBF, at any

rate, may have had no knowledge. They are bound by those records by an estoppel by convention; the estoppel does not extend to the details of the transaction entries. Accordingly it is open to LBIE to rely on the fact that, even though the off-leg was recorded as having been settled in the afternoon, LBF had not in fact paid the price on the off-leg, nor had anything else happened or been done which could amount to payment of that price. Absent payment, or an equivalent, LBF could not successfully assert its title against LBIE on the basis of settlement of the off-leg.

130. Mr Moss also criticised the theory that LBF only paid the price under each off-leg by way of offset against the price payable by LBIE on the on-leg of the next succeeding repo. He submitted that this meant that one repo could not be closed until after the next had opened, which was not only inconsistent with the book entries but also logically impossible. I disagree. To make an entry showing the settling of the off-leg was a normal and natural process, to be done in the ordinary course of the management of the Rascals operation. However, for such an entry to be made did not of itself show that payment had been made at that time. Until and unless payment was made, title was not transferred back to LBF.

131. In fact, payment could not be made, or even treated as made, until and unless a new repo was opened under which LBIE owed LBF the price under the new on-leg. Thus the book entry was legitimate by way of record-keeping but potentially misleading, if it were thought to show that the price had been paid on the off-leg, so that title had reverted to LBF, before the next repo was opened.

132. In my judgment, the price under an off-leg could not be, and was not, treated as paid until the next repo opened. At that moment the two liabilities were treated as set off against each other, so that the first repo was closed, on payment by LBF, but simultaneously the next repo was opened, on payment by LBIE. As a result, title to the securities, which had been vested in LBIE under and during the previous repo, and until the opening of the next repo, remained so vested by virtue of the next repo. That analysis seems to me to be correct and to justify the judge's conclusion in favour of the cradle to grave proposition. In particular it explains and justifies his observation at paragraph 328 that it was “concerned not with continuity of contracts but with continuity of absolute title”.

133. I therefore agree with the judge's conclusion as to the way in which the automatic Rascals process operated. LBIE was treated, by common convention, as paying the price on the on-leg of the first repo, by way of set-off against LBF's debt to it for the acquisition price. LBF was treated as paying the price on the off-leg of the first repo when, and not until, the next repo opened. At that time the price was treated as set off against LBIE's new obligation under the on-leg of the new repo. By the same token, LBIE was treated as paying the on-leg price under that repo at the same moment. Beneficial title to the securities passed to LBIE under the on-leg of the first repo, and remained vested in LBIE throughout the Rascals process until a resale to the street.

134. There is no legitimate basis for the argument advanced by Mr Moss that payment on the off-leg was habitually waived. That would have been inconsistent with the shared objective of the Rascals system. What was habitually waived, also an inherent part of the agreed basis on which the Rascals system was to operate, was payment (either way) of any amount arising (a) from changes in the marked to market value of the securities between the trade date and the settlement date, or from one day to the next during the series of repos, and (b) the application of the interest charge payable by LBF. Those amounts were left to be settled at the end of the month.

135. The judge rejected the submission that,

for this reason, unless the payment due from LBIE was the same as or greater than that due from LBF, LBIE did not acquire title under any relevant repo because it had not satisfied the obligation of payment upon which transfer of title was conditional at his paragraph 330. I need say no more than that I agree with the judge on this point.

136. Mr Moss also pointed to the fact that, as is common ground, LBF was entitled to any dividend or coupon payment on the securities while they were within the Rascals system. He showed us a memorandum by Mr Backhouse, in September 1997, in which he said that he took the view that the Rascals repo lasted for 23 hours 59 minutes and 59.999 seconds, and that "if a dividend arises that happens in the 0.001 seconds that the stock is back in 'custody'. Thus we are collecting rather than manufacturing the dividend." That supported his argument that the securities had to be and were regarded as in the beneficial ownership of LBF for part of the relevant time, rather than continuously in the beneficial ownership of LBIE.

137. I do not accept that submission. If relevant securities were held by LBIE over an income payment date, then clause 4 of the ICRA obliged LBIE to pay over to LBF an amount equal to (and in the same currency as) the income payment. Clause 5 of the Global Master Repurchase Agreement was to the same effect. I am not aware of any respect in which it could matter whether LBF was entitled to the dividend as such or rather to a payment from LBIE equal to the amount of the dividend, which is what Mr Backhouse referred to as a manufactured dividend. Mr Backhouse's opinion is no doubt entitled to respect, but he was not a lawyer and his subjective view as to the operation of the scheme which he helped to devise is not conclusive and may not even, strictly, be relevant.

138. This factor does not cause me to alter the view I have reached, namely that once the beneficial title to relevant securities had become vested in LBIE under the on-leg of the first repo, it remained so vested throughout the operation of the Rascals process. For those reasons I accept Mr Milligan's submissions in favour of the "cradle-to-grave" analysis.

Manual Rascals

139. I have dealt with the points arising so far only in relation to securities which were the subject of the automatic Rascals process. I must now cover the same points, so far as relevant, in respect of securities which were processed manually in a version of Rascals. In these cases the securities might not be subjected to the Rascals process until some time after their acquisition. Once they were so processed, it was done by way of stock loan, rather than repo, but that does not make any difference of substance in itself. Moreover the loans were open-ended, rather than only ever lasting overnight. That makes more of a difference in practice.

140. The reasoning which I have set out above in relation to the effect of the ICFA applies to these securities as well as to automatic Rascals. In principle, on its true construction, the ICFA would have applied to the funding of the original acquisition of the securities after June 2000, but in practice all parties behaved otherwise, and LBIE and LBF are bound, by an estoppel by convention, to the proposition that it was LBIE who advanced funds to LBF for the acquisition, not LBHI.

141. As for what happened thereafter, as I have mentioned, there was a monthly pay-down of unsecured amounts due between the affiliates. As regards automatic Rascals this covered only the sums payable by way of differences in the marked to market value and repo charges. These were the only sums that were treated as unsecured.

142. In argument before us, securities subject to manual Rascals were treated as falling into two categories. Where the application of the manual Rascals system occurred on the same

day as settlement of the acquisition from the street, no distinction was drawn (as regards that stage of the operation) between these cases and those subject to automatic Rascals. That seems to me to be logical and correct.

143. However, the manual application of Rascals might well not occur on the same day as the acquisition, and it might not occur until weeks or even months thereafter. It is this latter category of cases, which I will call late transaction manual Rascals cases, that requires separate analysis.

144. As regards this category of securities which were subjected to manual Rascals, two stages have to be considered: first upon the acquisition of the securities and secondly upon the making of the stock loan under the manual Rascals system. At stage one, LBIE acquired the securities for the account of LBF and paid the acquisition price on its behalf. LBIE was therefore a creditor of LBF for that amount at that stage. LBF was the beneficial owner of the securities. Until stage two nothing happened to give the beneficial title to LBIE. If the position had not changed by the end of the month, then LBF's unsecured debt to LBIE for the acquisition price was paid down at that time, together with any other such unsecured indebtedness. At that point, therefore, LBF would be the beneficial owner of the securities, owing no relevant debt to LBIE.

145. If thereafter, say in the second month, LBF made a stock loan to LBIE by way of a manual Rascals operation, this would give rise to an obligation on LBIE to pay the relevant collateral to LBF. When eventually the stock loan was brought to an end, that amount would be repayable by LBF to LBIE, with financing charges. If the stock loan were still outstanding at the end of the second month, then LBIE's debt to LBF would be paid as part of the month-end pay-down. LBIE would therefore have a good beneficial title to the securities under the stock loan.

146. If, to take a different example, the securities were acquired in one month and the stock loan was made in the same month, then once the stock loan had been made there would be two unsecured debts between LBIE and LBF, one each way. At the end of the month during which the acquisition and the stock loan were made, at the latest, all unsecured amounts would be cleared by way of the month-end pay-down. Accordingly, by then (whether or not before) LBIE would hold the full beneficial title to the securities under the stock loan, having paid in full the amount due on the on-leg of the stock loan. So far as I am aware, it is unnecessary to decide whether LBIE held the beneficial title earlier than the month-end in these cases.

147. During the hearing we were addressed on the basis that the last month-end paydown took place on 31 August 2008. Since then, Mr Milligan has informed the court that the paydown on that date was only provisional and was not confirmed, as it needed to be. Accordingly he revised his submissions on the basis that the last effective monthly pay-down took place on 31 July 2008. LBF was able to inform us that it agreed that this was the correct date as regards the final paydown.

148. On this basis Mr Milligan submitted that in almost all cases of securities affected by manual Rascals the beneficial as well as the legal title would be in LBIE, by virtue of a stock loan to LBIE under which LBIE's payment obligation had been satisfied by the critical date, 15 September 2008. The only case in which that would, or might, not be true is where the stock loan had been entered into after 31 July 2008, after the last effective month-end pay-down that occurred before the collapse of the group on 15 September 2008. In all other cases, although there may have been an unsecured debt from LBIE to LBF under the stock loan for a time, it would have been paid in full by way of the pay-down at the end of the month. He also suggested (after the hearing) that there might be some cases in which LBIE had paid the collateral under the stock loan in some other way, and he invited

the court to keep that possibility open, as the judge had done in respect of another affiliate in paragraph 2(F) of his order.

149. That seems to be the one respect in which some late transaction manual Rascals cases may be in a different position from those subject to automatic Rascals. The skeleton argument on behalf of LBF mentioned two cases in which securities acquired during July 2008 were made the subject of stock loans in August 2008. There may have been others.

150. The judge dealt with manual Rascals cases at paragraphs 370 to 374. He held that despite the possible factual differences which I have mentioned, in particular as regards the late transaction manual Rascals cases, there was no difference in legal result. I agree with what the judge said there, subject to my difference from the judge about the ICFA which, however, does not affect the result. It seems to me, however, that the relevant points may have been rather differently argued before us. I would hold, for the reasons given above, that the position is the same in principle, but that it is different in practice for any securities in relation to which a stock loan under manual Rascals was first entered into after 31 July 2008, unless LBIE can show that it paid the collateral under the stock loan in some other way. Moreover, LBF accepts that where both the acquisition from the street and the stock loan took place after 31 July 2008, the estoppel applies to the relevant securities in the same way as to the securities subject to automatic Rascals and to immediate manual Rascals processes.

What happened at the end of the process?

151. The other aspect of the appeal is concerned with the end of the process rather than the beginning. This applies only to automatic Rascals cases, because the stock loans under manual Rascals remained open indefinitely.

152. The conclusions I have come to about the automatic Rascals process mean that, when the group collapsed, LBIE had the beneficial as well as the legal title to the securities which were then subject to the automatic Rascals process. LBF nevertheless contends that, at one point or another thereafter, the beneficial title reverted to it, albeit without any payment being made to LBIE at that stage.

153. Mr Moss' primary argument in support of this conclusion relied on the 5 hour or so gap between settlement of the off-leg, as recorded, and the opening of the next on-leg. He accepted that the price on the last off-leg was not in fact paid. He submitted that there had been a habitual waiver of the requirement of payment during the 5 hour gap, which would have applied as usual on the settlement of the last off-leg. I reject that submission for the reasons set out at paragraph [134] above.

154. I therefore conclude, essentially for the reasons already given above, that payment was required of LBF on the final off-leg, as it had been on all previous repos, and since LBF did not in fact make payment, the beneficial title did not revert to it from LBIE under the last repo, even though the repo was shown to have been settled on 23 September 2008.

155. At that stage, the records showed that the off-leg had settled but that LBF owed LBIE the price on the off-leg. This was shown as an unsecured payable, rather than as secured. That could lead to an inference that LBIE did not have the beneficial title, since otherwise it could and should have been shown as secured. However, the fact that LBF was shown as owing LBIE the price makes it clear (as is in fact common ground) that LBF had not paid the price under the off-leg. It therefore had not satisfied the condition upon which transfer of title depended. Thus the entries in the records were not consistent, but the plain and indisputably correct record that LBF had not yet paid the price showed that it did not have the beneficial title.

156. Mr Moss put forward an argument based on LBF's letter dated 16 September 2008 which, if correct, led to the conclusion that the final repo should be regarded as that which closed on that date, because all later repo transactions were unauthorised by LBF. On the reasoning which I have set out above, this makes no difference, because, on this assumption, LBF did not pay the price for the off-leg which was recorded as having settled on 16 September, and nothing that happened after that, including the opening of a new but (on this basis) unauthorised repo on that date, can affect the position. Nevertheless I will deal with the point briefly.

157. I have mentioned the letter dated 16 September 2008. It was sent from LBF to LBIE, so far as we can see at 3.14pm (probably Swiss time) on 16 September 2008, in the following terms, so far as relevant:

"Please note that [LBF] terminates all intercompany agreements or arrangements with [LBIE] including all branches … to act on behalf of LBF or as an agent for LBF without the approval, in particular no transactions in cash or securities are allowed …"

158. The judge did not need to decide this point, any more than I do. He said at paragraph 361 that he inclined to the view that the letter did not affect the operation of automatic Rascals because both parties dealt with each other as principals. The correct analysis of the repo transactions which were generated automatically by the computer system, in relation to any securities which (according to the instructions given to the computer) were eligible for automatic Rascals, seems a somewhat metaphysical exercise. No human intervention was necessary for the process to continue. Nevertheless, it seems to me that, given that the operation of the computer system was under the control of LBIE staff, and also given the discretion afforded to LBIE under the ICRA (see clause 1 quoted at paragraph [40] above), it would be right to regard LBIE as acting for itself as principal but also for LBF as agent, in relation to the automatic Rascals process. I conclude that, if the implications of the letter of 16 September 2008 had been thought through at the time, the automatic Rascals process should have been brought to an end at that point in time. It is understandable that this was not addressed at that time, when all concerned had many other things to think about and to do. But in principle it seems to me that the outcome of the automatic Rascals process ought to be approached on the basis that the last authorised repo (and therefore the last relevant transaction) was that which closed on 16 September 2008.

159. Mr Milligan pointed out that under the ICRA 7 days' notice of termination was required by clause 8. No such notice was given. Mr Moss' answer, which I accept, is that the ICRA as such was not terminated, but it was a facultative agreement. Nothing compelled LBF to submit any securities to the agreement, or to the continuation of the arrangements entered into under it. It was open to LBF to terminate by immediate notice LBIE's authority to enter into future transactions on LBF's behalf. Seven days' notice would have been required for a change to the terms governing whatever transactions were to be entered into between the parties, but not for LBF to call a halt to the entry into any future transactions.

160. As I have said, when the automatic Rascals process came (or should have come) to an end makes no difference. LBF did not pay the price on the final off-leg whether it occurred on 16 or on 23 September 2008, and therefore the beneficial title to the securities did not revert to LBF from LBIE.

161. Mr Milligan had separate arguments about what occurred on 23 September 2008, if that had been relevant. Since in my judgment it is not relevant, and it is not necessary to the determination of the appeal, I do not propose to lengthen this judgment still further by saying anything more about points which do not arise.

Disposition

162. For those reasons I would dismiss both the appeal and the Respondent's Notice, save that if there were any securities which were subject to the manual Rascals process on 15 September 2008, having been made the subject of a stock loan after 31 July 2008, then LBIE did not have the beneficial title to those securities, which therefore belonged beneficially to LBF at the moment of the group's collapse, subject, however, to the possibility that LBIE can show that it paid the collateral under the stock loan in some other manner, or that the securities were first acquired from the street after 31 July 2008. Those possibilities need to be kept open, so as to be capable of resolution by the judge if the parties cannot agree the position.

163. Nothing in my reasoning is dependent on whether LBIE was entitled to a lien or any equivalent right over the relevant securities. It is therefore not necessary to refer or remit any question about that to the judge before the issues on the appeal can be determined.

Lord Justice Patten

164. I agree.

Lord Justice Tomlinson

165. I also agree.

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IN THE SUPREME COURT OF JUDICATURE
IN THE COURT OF APPEAL (CIVIL DIVISION)
ON APPEAL FROM BRENTFORD COUNTY COURT
(Mr Recorder White)

CCRTF 98/1122/2

Royal Courts of Justice
The Strand
London WC2

Tuesday 20th July, 1999

B e f o r e:

LORD JUSTICE SCHIEMANN
MR JUSTICE LINDSAY

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SUMIR SINGH DHINGRA
Respondent

\- v -

SURJIT SINGH DHINGRA
Appellant

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(Computer Aided Transcript of the Palantype Notes of
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THE APPELLANT appeared on his own behalf

MR D REES (Instructed by Messrs Darlington C Parkinson, London W3 9EH) appeared on behalf of the Respondent

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J U D G M E N T
(As approved by the Court)

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Tuesday 20th July, 1999

JUDGMENT

LORD JUSTICE SCHIEMANN: I will ask Mr Justice Lindsay to give the first judgment.

MR JUSTICE LINDSAY: This is the appeal of Mr Surjit Singh Dhingra against the order of Mr Recorder White sitting at Brentford County Court on 20th July 1998. By the learned Recorder's order it was declared that a National Savings Bond and some Portman Building Society accounts were held by Mr Surjit Singh Dhingra (who was the defendant below) either as trustee for the claimant, his only son, Sumir Singh Dhingra, in some of the instances, or by the father and son together as trustee for the son in another case. There were consequential orders for the transfer of proceeds to the son; for an account of dealings; for payment to the son of whatever amount should be found due on the taking of that account; and for costs. The father was ordered to pay the son's costs of both the son's claim and the father's counterclaim. I have not in fact seen the father's counterclaim; that was dismissed.

The father applied to the learned Recorder for a stay, but that was refused. But, later on, the Court of Appeal required the monies which were the subject matter of the action to be held by the claimant's solicitors in an interest bearing account to await the outcome of his appeal, and that is where they remain.

It will be noticed that both the father and the son are "Mr SS Dhingra". It is convenient, to avoid confusion, if I speak of them simply as the father and the son.

The son is now 23 years of age. His mother, the claimant's wife, unhappily died in January 1987. In consequence of that death, an insurance policy matured and some £33,000-odd became payable to the father. At that time the father already had an account with the Portman Building Society and on 13th February 1987 he opened a new account with that building society. The application form for the

opening of that account, unhappily, is no longer available. But there were statements of account produced by the building society which are headed "Trustee for SS Dhingra". Moreover, the son found a statement dated 31st March 1989 relating to that account, prepared by the building society, and that also indicates "Trustee for SS Dhingra". The learned Recorder held that the account which was opened by the father had been marked by the building society as being held by the father as "Trustee for SS Dhingra", and ,in all the surrounding circumstances that were brought to his attention, the learned Recorder held that that meant that the account was held by the father as trustee for the son, who was then aged 11.

That first Portman Building Society account remained unchanged until 8th November 1991. The money was then moved by the father to a second Portman account, and, again, that second account was held by the learned judge to have been headed by the building society "Trustee for SS Dhingra"; and again there are building society statements of account headed "Trustee for SS Dhingra". The second account was then moved to a third account, also held by the learned judge to have been headed "Trustee for SS Dhingra". That was in August 1992 and, again, there are available building society statements of account headed "Trustee for SS Dhingra". There was then a move to a fourth account in February 1993. By then the balance was down to £19,000-odd, and this time and for the first time the account appears to have been headed simply "SS Dhingra". There were several subsequent movements, including the purchase of a National Savings Bond in the name of both the father and the son.

The learned Recorder had before him such accounting records as are nowadays still available and he heard the oral evidence of both the father and the son. He made findings as to certain payments in and out of the accounts. He held that on the balance of probabilities the form which the father had completed on the opening of the very first relevant account (the form itself was no longer available, as I have mentioned) was the same, as a blank form, as those which were later completed by the father

and which were available. They had on them a space for completing the name of a trustee or a beneficiary, and that was where, in the learned judge's holding, the words "Trustee for SS Dhingra" would have been entered. The father accepted that the forms as such had remained the same throughout the whole history of the matter. The learned judge saw no other reasonable explanation of how the statements of account and the contemporary statement of 31st March 1989 should have been marked "Trustee for SS Dhingra" if the form had not been completed in the way that he held that it had been.

The father had said it was a complete mystery how the trusteeship had come to be noted. The father also claimed that the passbooks for the closed accounts had been thrown away, not by him but by the building society, which might be thought to be a remarkable piece of evidence.

The learned judge held that the three certainties necessary for the setting up of a trust were present. He held that there was nothing to suggest that the father had reserved any benefit for himself, that the beneficiary in all the circumstances was plainly intended to be the son and that the National Savings Bond had been purchased out of the account at the Portman which, according to the learned judge's holding, was a trust account. Therefore it was, without more, itself held in trust for the son. That was a conclusion which the father had unsuccessfully sought to resist. The judge ordered the taking of the account which I have mentioned, in order to find out what dealing had been conducted with trust monies over the years. It may be added, on the facts, that the father had given written evidence that had included that the name of the son had been added later, that is to say after the original opening of the Portman Building Society account. However, he later claimed in oral evidence that that was a mistaken reference and that it was only the National Savings Bond that he was talking about when he spoke of the name of the son being added. There was plainly some room for a conclusion that the father's evidence had been unsatisfactory in those areas.

Before I turn in more detail to the grounds on which the father relies before this court today, it would

be well to remind myself of some unquestionable propositions of law. Mr Dhingra, the appellant, has mentioned Snells Equity 29th ed. which, of course, is a very standard work. There are five brief propositions that one ought to have in mind as stemming from that work. First of all, as far as concerns personalty, which is what we are here concerned with, a declaration of trust may be by word of mouth or even inferred from conduct, (Snells Equity page 123); secondly, no particular form of words in necessary, (Snells Equity page 124); thirdly, where the property in relation to which the trust is declared is already in the name of the declarer of the trust, the trust is, as it is put, "Completely constituted the moment that the trust is declared", (Snells Equity page 121); fourthly, once the trust is completely constituted it can be enforced by a beneficiary even if he or she is a mere volunteer (Snells Equity page 120). The notion that equity will not assist a volunteer therefore has no application in this case because this is a case where a trust was declared and therefore was completely constituted from its first moment of existence; fifthly and lastly, in general a completely constituted trust cannot be revoked by the settlor unless the settlor has reserved a power of revocation in the settlement itself, (Snells Equity page 127). Those are elementary propositions which need to be borne in mind as the story unfolds.

The appellant, the father, has appeared before us in person, as indeed he had below. He is a retired civil servant. He holds an MA and LLM (London) and his knowledge of the law is not immaterial, as I shall come on to. He has not only addressed us orally, but, before that, he prepared a skeleton argument. I do not understand his oral argument to be as full as the skeleton. I think I will give him the benefit of treating the skeleton as the full argument which he would wish to have considered. He raises a number of points. The first two can be taken together under the heading of "intention and creation of trust". In effect he urges (and it is a point he has orally emphasised) that there was no sufficient evidence before the learned Recorder to justify the holding that there had here been an intention on the father's part to declare a trust in favour of the son. However, against that, there are a number of features.

There was a holding that the first relevant Portman account was marked by that building society as "Trustee for SS Dhingra" and it cannot be said that there was no adequate material for such a conclusion. There was, for what it was worth, a holding also that the father already had an existing account with the Portman Building Society that was not so marked; which, of course, invites the thought: if he had merely intended to pay money in for his own entire benefit, why should he not have used that pre-existing account?

There was a holding that the second and third accounts were also headed "Trustee for SS Dhingra", there, again, there was some material for such a conclusion. The learned Recorder commented, correctly, that one cannot alone hold in trust for oneself, so if the account was, as he held, marked "Trustee for SS Dhingra" it cannot have been the father declaring in his own favour, but could only, in context, have been the father declaring himself to be trustee for the son. There was some evidence in support of a holding as to the father wishing at that time to put money beyond the reach of his daughter, with whom he had fallen out. The learned judge also held that the son's welfare was at the time at the very forefront of his mind. The father accepted in oral evidence that when he received the £33,000-odd he felt the need to make provision for the son, for a sense of security. His son, he said, was his paramount consideration at the time. All that is, at any rate, not inconsistent with the creation of a trust in the son's favour.

The learned Recorder held (and here, in particular, the father's education and legal learning unfortunately worked against him) that if the building society had consistently been in error in marking the accounts "Trustee for SS Dhingra", the father would surely, as a man so qualified, have done something about it; presumably he would have sought to have that description erased from the record of the building society. Yet nothing of the kind was done. The father had plainly received the statement of 31st March 1989; that was found to be the case; the son had found the document amongst his father's papers. The father accepted that that document had been received by him. It is in the nature of

things likely that that was not the only paper sent by the building society to the father over a period of years because the father would, of course, have needed to fill out tax returns and so on. Moreover, the father accepted that he was more than familiar with the whole concept of trusts.

Although, of course, what was precisely in the father's mind on 13th February 1987 could not have been directly proved, there was (as I, for my part, would think) ample material for the learned Recorder to infer that there had, on the father's part, at that time been an intention to declare a trust of the account in favour of the son. It will be remembered that inference from conduct can suffice, as the reference to Snells Equity indicated. That is all I say on the intent and the creation of a trust.

The third point that the skeleton argument gives rise to depends on the case called Warriner v Rogers (1873) LR Eq Cas 340. That was a case before Vice-Chancellor Bacon. I am not sure how far the father would wish to have this point dealt with, it is certainly in his skeleton, although he has not mentioned it orally. The passage from the skeleton which the father emphasises is this:

> "In order to give validity to a declaration of trust of property, it is necessary that the donor or grantor should have absolutely parted with his interest in the property and have effectually put such interest beyond his own reach."

Taken very literally, without a fuller understanding of the context, that would seem to deny efficacy to a declaration of trust, because where there is a declaration of trust the legal estate remains in the settlor. But that would be totally to misunderstand the drift of the case Warriner v Rogers. In that case the learned Vice-Chancellor cited with approval the well-known case of Milroy v Lord, which makes it quite plain that a declaration of trust in which the legal estate remains in the declarer but the beneficial interest passes by way of the declaration to another is a perfectly sound way of creating a trust. I do not think I need to go further into the detail, especially since the father has not actually referred to Warriner v Rogers before us. But there is nothing in that point that assists the father in this case.

Nor can the fact that the National Savings Bond was in the name of the father and son greatly assist the father because if, as the learned Recorder held, the Savings Bond was bought with trust money held in trust for the son, then plainly the father could not divest the son of the benefit of that by the simple device of putting the bond in joint names rather than, for example, in the son's own name. It has to be remembered also that the son at the time was a minor.

The next point is headed "Revocation". I have already noted the passage in Snells Equity that in general the settlor cannot revoke a completely constituted trust unless a power so to do is reserved. There are exceptions available in the case of fraud, mistake or misapprehension but the burden in all such cases is on the settlor (Snells Equity page 128) save where there is undue influence exerted. But, of course, here one can hardly have a case where an infant son could be said to be exerting undue influence on an adult father. So nothing there assists the father either.

Next Mr Dhingra has a heading called "Object", meaning the object of the trust. At page 9C of the judgment the learned Recorder says:

> "Thirdly, the objects or persons intended to have the benefit of the trust must be certain. Clearly, one name will have been put down there as the beneficiary, and that is the Plaintiff. [In other words, the son.] So there was, in my judgment, absolute certainty here."

Given his findings that the account had been opened marked "Trustee for SS Dhingra", and that that necessarily referred to trusteeship of which the son was beneficiary, that sentence beginning "Thirdly" is, as it seems to me, completely unshakeable.

Next in the skeleton there is reference to "balance of probabilities". The learned Recorder did indeed use that phrase. In a civil case such as this it was, of course, the correct test for him to have in mind and

it cannot be complained of. It leads to a complaint by the father that the judge ignored the documents in the case. On the contrary, as it seems to me, he paid attention to such limited documents as there were and, in particular, to the document of 31st March 1989, referable to the first account and showing "Trustee for SS Dhingra", and also to the later accounts that were produced by the building society and headed "Trustee for SS Dhingra". The father does not identify any particular document which he says has been ignored save a document which he produced showing outgoings that he has paid on his son's behalf. But that, of course, does not deny the existence of the trust, which is the matter with which we are concerned.

Save for a point as to costs (as to which it would be appropriate to hear father and son later rather than now) I have now dealt with all the points that were raised in the skeleton argument, and also the points that were raised orally. It is, of course, a sad and unfortunate case. It is never pleasant when a father and son are driven to such lengths as hostile litigation, as this case indicates. Whether there is room for some magnanimity on the son's part when the question of how far, if at all, the account is to be pursued and then whether payment under the account is required are not matters for us. But, simply limiting myself at this stage, leaving aside costs, to the question of whether the appeal should be allowed or dismissed, for my part, I would dismiss the appeal.

LORD JUSTICE SCHIEMANN: I agree with the judgment that has been delivered and that this appeal should be dismissed for the reasons there given.

ORDER: Appeal dismissed with costs. Detailed assessment of the Respondent's costs.

(Order not part of approved judgment)